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Dissertation

**THE ROLE OF PSYCHOACTIVE DRUGS IN THE CONCEPTION,
PERFORMANCE, AND APPRECIATION OF SIXTIES PSYCHEDELIC MUSIC
IN CALIFORNIA AND THE SOUTHWEST**

by

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“We have to do something that will almost ensure accident since the human being is so damn proficient at grooving himself a rut and staying in it at all costs so that he doesn't get hurt. We have to do something to break us out of the ruts of our minds, which have been going along the same kind of thinking for so many thousands of years that we don't even realize that our thoughts are going nowhere.”

– Ken Kesey

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ABSTRACT

This dissertation examines the various ways in which the experience of psychoactive drugs such as marijuana, LSD, and other substances influenced the development of psychedelic music on the West Coast during the Sixties. The first chapter of this work chronicles the evolution of mainstream America's understanding of psychoactive drugs. It focuses, in particular, on the role of mid-century figures such as Aldous Huxley, Ken Kesey, and Timothy Leary in disseminating the psychedelic paradigm, which held that certain psychoactive substances were capable of helping individuals gain a greater understanding of themselves, others, and the nature of existence. The second chapter of this work explores how the term "psychedelic," and the

experiences the term espouses, came to be used as musical descriptors. It specifically details the various ways that amateur participation, musical eclecticism, and technological advances resulted in highly innovative works that provided surreal experiences similar to the drugs that shared their name. Chapter three explores self-report and laboratory research concerning the subjective effects of marijuana and LSD on the experience of sound, music, and creativity. It also presents new findings from a self-report study of 181 participants, which examined the various ways that marijuana affects the appreciation of specific musical sounds. The fourth and final chapter performs a psycho-aesthetic analysis of three examples of psychedelic music using the findings discussed in chapter three and theories from the field of music cognition. It posits various ways in which a direct relationship can be appreciated between the subjective effects of certain psychedelic substances and the experience of psychedelic music. In some instances, it asserts that psychedelic music can be understood to be emulating the effects of substances through its incorporation of sounds and musical structures that are emblematic of the specific effects of these drugs. In others, it suggests that these drugs enhance the experience of psychedelic music by playing upon the altered sensibilities of listeners who were experiencing its sounds under their effects.

TABLE OF CONTENTS

DEDICATION	v
ACKNOWLEDGMENTS	vi
ABSTRACT	vii
TABLE OF CONTENTS	ix
LIST OF MUSICAL EXAMPLES	xiii
INTRODUCTION	1
Current Scholarship on Psychedelic Music	5
Contribution of this Dissertation	8
Approach to the Research of Popular Music	10
Chapter List	13
A Word about American Drug Culture	16
CHAPTER 1 – DEVELOPMENT OF THE PSYCHEDELIC CONCEPT AND CULTURE	18
The Cultural Context of Psychedelic Music	19
A Brief History of Psychoactive Drugs in the Western World	20
Nineteenth Century	21
Early Twentieth Century	28
The Emergence of the Psychedelic Paradigm	36

William James and Nitrous Oxide	36
The Discovery of LSD	38
Aldous Huxley, Humphrey Osmond, and the Coining of the term “Psychedelic” ...	40
Dissemination of LSD.....	42
Marijuana, Jazz, and the Beat Generation	44
The Publication of “Seeking the Magic Mushroom” in <i>Life</i> Magazine.....	52
Ken Kesey, Timothy Leary, and the Development of the American Psychedelic Subculture	54
Ken Kesey	55
Timothy Leary	73
Branches of Drug Culture Established in the Sixties.....	85
CHAPTER 2 – EMERGENCE OF PSYCHEDELIC MUSIC IN CALIFORNIA, NEVADA, AND TEXAS	87
A Framework for Understanding Psychedelic Music	88
Defining “Psychedelic Music”	88
Constructing a Narrative of the Emergence of Psychedelic Music	91
Chronological History of the Emergence of Psychedelic Music	92
Early Developments in the Evolution of Psychedelic Music.....	92
Emergence of Local Psychedelic Music Scenes in San Francisco and Virginia City, Nevada	109
Emergence of the Psychedelic Scene in Austin, Texas	141
Psychedelic Folk and Blues	147

Advances in Electro-acoustic Music and Studio Technology	157
Noteworthy Developments on the East Coast	169
Consolidation and Dissemination of the Psychedelic Sound.....	172
Synopsis of Early Psychedelic Music	187
 CHAPTER 3 – EFFECTS OF PSYCHEDELIC DRUGS ON CREATIVITY AND THE EXPERIENCE OF SOUND AND MUSIC	 192
Understanding the Psychedelic Drugs of the Sixties	193
LSD	195
Effects of LSD on the Appreciation of Music	199
Effects of LSD on the Creative Process.....	208
Marijuana	220
Effects of Marijuana on the Appreciation of Music	221
Effect of Marijuana on the Creative Process	252
The Varying Roles of Marijuana and LSD	260
 CHAPTER 4 – PSYCHO-AESTHETIC ANALYSIS OF PSYCHEDELIC MUSIC....	264
Understanding Psychedelic Music through the Effects of Psychedelic Drugs	265
Select Effects of Psychedelic Drugs and their Possible Relationship with Aesthetic Features of Psychedelic Music.....	268
Dechronocization	268
Synesthesia.....	271
Depersonalization	272
Dynamization	274

Heightened Auditory Acuity	276
Hypersuggestibility	278
Altered Spatial Awareness	280
Three Case Studies Applying the Psycho-Aesthetic Perspective	281
“Eight Miles High”	282
“Rejoyce”	286
“Tomorrow Never Knows”	289
Towards a Broader Application of Psycho-Aesthetic Analysis.....	293
CONCLUSION.....	296
Epilogue	297
Understanding Psychedelic Music	298
Towards a Better Understanding of the Relationships between Drugs and Music.....	303
BIBLIOGRAPHY	306
DISCOGRAPHY	321
VITA	323

LIST OF MUSICAL EXAMPLES

Example 1 – “Eight Miles High” Opening Bass Motive	283
Example 2 – “Eight Miles High” Lead Guitar “India” Motive	284
Example 3 – “Eight Miles High” Lead Guitar Solo	285
Example 4 – “Rejoyce” Opening Piano Passage	288
Example 5 – “Tomorrow Never Knows” Lead Guitar Solo	292

INTRODUCTION

This dissertation explores the complex relationship between psychedelic drugs and the music that bears their name. It details the history of how certain substances have been conceptualized in American society, and the ways in which these understandings informed the music that emerged. This dissertation also illustrates the many ways in which the musical structures and sounds that defined the genre were related directly to the fantastical subjective effects of these drugs. In discussing these developments, it seeks to place them within the larger narrative of American history, and demonstrate their continuing relevance to contemporary questions surrounding psychoactive drugs and their place in American society.

In the history of the United States, few decades witnessed the degree of cultural change that occurred in the 1960s. It was a period in which long-standing notions of progress in the country were problematized and rejected by burgeoning counterculture movements. Indeed, new narratives in civil rights, racial equality, feminism, sexual liberation, socialism, pacifism, and environmentalism were conceived in the Sixties. Today, the decade is commonly remembered as an era of peace and love. It is sometimes forgotten, however, that the promotion of these sentiments was a campaign to mitigate the considerable unrest that permeated American society at that time.¹ It was a decade in which Americans were repeatedly confronted with the prospect of pending disaster. In 1962, the public was faced with the specter of a nuclear war with the Soviet Union. A year later, they would witness the assassination of John F. Kennedy, and later his brother

¹ A good discussion of this unrest can be found in Maurice Isserman and Michael Kazin, *America Divided: The Civil War of the 1960s*, 3rd ed. (New York, NY: Oxford University Press, 2008).

Robert. In 1964, longstanding conflicts surrounding issues of race came to a head as Congress passed the Civil Rights Act. Young American men faced the prospect of being drafted to fight in Vietnam beginning in 1965. All of these events contributed to widespread feelings of tension and uncertainty that motivated a segment of the American population to live their lives with a sense of immediacy. Many individuals sought to break free from the normative values of the Eisenhower era. They sought out new relationships, experiences, and pleasures, and were increasingly uncompromising in their refusal to allow others to interfere in this quest. These Americans decided not to settle for the status quo—a mandate that was greatly assisted by soaring levels of disposable income and the new interstate highway system that connected the country.²

A persistent subtext in these quests for self-realization was the use of psychedelic drugs, including marijuana, LSD, and psilocybin.³ Many of these psychoactive substances had been consumed for some time in the Americas. Marijuana, for example, had been popular among black and Latino Americans in the United States since the beginning of the twentieth century. The potent psychedelic cactus peyote (mescaline) had long been used in the religious rituals of Native Americans, and “magic” mushrooms (psilocybin) are believed to have been used by indigenous peoples in Central America for thousands of years.⁴ The most modern psychedelic drugs to be used in the decade was

² Marilyn Coleman and Lawrence H. Ganong, *The Social History of the American Family: An Encyclopedia* (Thousand Oaks, CA: Sage Publications, 2014), 1412.

³ In this dissertation I commonly refer to marijuana as a psychedelic drug. While it is not a hallucinogen, marijuana shares many of the psychological effects with more potent substances, such as LSD, and may be understood in this manner (Hockenbury 2008: 185). It is also sometimes referred to as a “minor psychedelic” drug to delineate it from more hallucinogenic drugs (Tart 1969: 321).

⁴ Susan Toby Evans and David L. Webster, *Archaeology of Ancient Mexico and Central America: An Encyclopedia* (New York, NY: Garland, 2001), 372.

lysergic acid diethylamide (LSD), which was accidentally discovered in 1943 by a Swiss chemist named Albert Hofmann. It was not until the 1960s, however, that the larger American public developed a curiosity for these substances and their effects. This interest was fuelled, in part, by references to drugs made in the 1950s by Beat authors such as Allan Ginsberg, William S. Burroughs, and Jack Kerouac, as well as Aldous Huxley's extensive discussion of psychedelics in his essay *The Doors of Perception* (1954).⁵

Huxley was a particularly prominent force in redefining Americans' attitudes towards psychedelic drugs. He asserted that these substances could empower an individual to access his or her "mind at large," a state of consciousness in which one may appreciate thoughts, feelings, and sensations that the brain normally filters out because they are not relevant to survival.⁶ This understanding constituted a significant paradigm shift surrounding these substances. Whereas these drugs had previously been conceptualized as substances that crippled one's mind, like a mental illness, Huxley's paradigm asserted that they enabled it to function in new ways by disabling the brain's "reducing valves."⁷ Indeed, many who tried psychedelic drugs found this non-scientific explanation of their function to be a meaningful description of what they experienced.⁸

For some, experimentation with psychedelic drugs was merely one of many indulgences that they sampled in the Sixties. For others, the experience of psychedelic

⁵ Aldous Huxley, *The Doors of Perception and Heaven and Hell* (New York, NY: First Harper Perennial Modern Classics, 2009).

⁶ Ibid., 23-24.

⁷ Ibid.

⁸ The importance and influence of *The Doors of Perception* is perhaps best summarized by philosopher Alan Watts, who discusses Huxley's contribution in the preface of his own seminal book *The Joyous Cosmology* (1965) years later.

drugs constituted a life-altering experience. Over the course of the decade, the ideology of the latter group coalesced into a cultural movement that resembled the religious “Great Awakenings” that had repeatedly swept the country in the previous century.⁹ In addition to establishing a loose canon of beliefs based on the principles of relativism and individualism, this psychedelic subculture codified artistic aesthetics and created their own cultural products, including the music that is the subject of this dissertation.

The following sections provides a brief summary of the current literature available on this subject, the contribution this dissertation makes to it, and the methodologies employed in the following chapters.

CURRENT SCHOLARSHIP ON PSYCHEDELIC MUSIC

Plenty of scholars have discussed Sixties psychedelic music in the context of publications written on broader topics, such as the history of rock music, or works dedicated to specific artists that had some relationship to the genre. Remarkably few publications have been devoted solely to the subject of psychedelic music, however. Most of the books that are solely devoted to the topic are rock biographies and topical histories written by journalists and music critics.¹⁰ The bulk of these publications differ from academic sources in that they fail to give comprehensive accounts of the history and often

⁹ For a discussion of these events see Thomas S. Kidd, *The Great Awakening: A Brief History with Documents* (Boston, MA: St. Martin's, 2008).

¹⁰ See for example Jim DeRogatis, *Turn on Your Mind: Four Decades of Great Psychedelic Rock* (Milwaukee, WI: Hal Leonard, 2003); Richie Unterberger, *Eight Miles High: Folk rock's Flight from Haight-Ashbury to Woodstock* (Berkeley, CA: Backbeat Books, 2003); Gene Sculatti and Davin Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968* (New York, NY: St. Martin's Press, 1985).

provide only superficial analyses of events. Moreover, they often do not offer citations for their sources. Many simply provide a bibliography at the end of the monograph or make reference to having performed interviews in its preface. Despite these deficits, the content of these books cannot be dismissed. They contain information gleaned from interviews with historical participants who are now dead or largely inaccessible, and while they are not academic in nature many make meaningful arguments.

In terms of academic sources, a Master's thesis and Ph.D. dissertation have been written on the subject.¹¹ The dissertation, entitled *Psychedelic Music in San Francisco: Style, Context, and Evolution*, was completed in 2006 at Concordia University by a Canadian ethnomusicologist named Craig Morrison. The dissertation explores the rise of psychedelic music through an original seven-stage model of stylistic development. Morrison's contribution touches on many areas I explore in my research, but whereas most of his arguments seek to contextualize psychedelic music within a broad framework of dissemination and stylistic evolution, this dissertation asserts a more direct relationship between the musical aesthetic of psychedelic music, the effects of psychedelic drugs, and the ideals of the psychedelic subculture.

Facets of psychedelic music have also been discussed in several academic journals. A handful of music theorists, such as Graeme Boone and Sheila Whiteley, have examined the distinct musical language of specific psychedelic artists using frameworks

¹¹ Timothy J. Ellison, "The Band Are Not Quite Right: Psychedelic Music and Surrealism" (MA thesis, Kent State University, 2006); Craig Morrison, "Psychedelic Music in San Francisco: Style, Context, and Evolution" (PhD diss., Concordia, 2000).

such as harmonic, formal, stylistic analysis.¹² There is also a sub-section of the scholarly literature that explores the unique culture that surrounded the Grateful Dead. These sources largely explore the Deadhead phenomenon from a sociological and anthropological perspective, and are relevant to the subject at hand given this group's considerable influence upon the larger psychedelic scene.¹³

In terms of monographs, there are two academic publications worth noting. The first is Nick Bromell's book *Tomorrow Never Knows: Rock and Psychedelics in the 1960s* (2000).¹⁴ Bromell's publication offers an interesting perspective that benefits from his personal experiences growing up as a teenager in the Sixties, and meaningfully discusses the decade's music in relation to important cultural developments at that time. The book, however, focuses much of its attention on the Beatles, Bob Dylan, and Jimi Hendrix, and provides a different viewpoint from this dissertation, which focuses almost exclusively on the psychedelic music that emerged in California and the Southwest. The second monograph is *Sixties Rock: Garage, Psychedelic, and Other Satisfactions* (1999) by Michael Hicks.¹⁵ In contrast to Bromell's more cultural perspective, Hicks explores the history and evolution of the musical language that comprised garage and psychedelic

¹² Graeme M. Boone, "Tonal and Expressive Ambiguity in 'Dark Star,'" in *Understanding Rock: Essays in Musical Analysis*, ed. John Rudolph Covach and Graeme M. Boone (New York, NY: Oxford University Press, 1997); Sheila Whiteley, "Progressive Rock and Psychedelic Coding in the Work of Jimi Hendrix," *Popular Music* 9, no. 01 (1990).

¹³ See for example Rebecca G. Adams, "Inciting Sociological Thought by Studying the Deadhead Community: Engaging Publics in Dialogue," *Social Forces* 77, no. 1 (1998); Nadya Zimmerman, "Consuming Nature: The Grateful Dead's Performance of an Anti-Commercial Counterculture," *American Music* 24, no. 2 (2006).

¹⁴ Nicholas Knowles Bromell, *Tomorrow Never Knows: Rock and Psychedelics in the 1960s* (Chicago, IL: University of Chicago Press, 2000).

¹⁵ Michael Hicks, *Sixties Rock: Garage, Psychedelic, and Other Satisfactions*, Music in American Life (Urbana, IL: University of Illinois Press, 1999).

music through the lens of music theory. Moreover, he posits a model for understanding the musical attributes of psychedelic music through the effects of psychedelic drugs. This approach is the foundation for many of the theoretical models I employ in chapter four of this dissertation.

CONTRIBUTION OF THIS DISSERTATION

This dissertation makes a significant contribution to the field in several respects. It provides a nuanced account of the origins and nature of the subculture in which psychedelic music was incubated, discussing the various ways that the legacies of opium addiction, prohibition, and the marijuana “reefer wars” of the 1930s informed the American public’s perception of psychoactive drugs. It also provides a critical and comprehensive account of how psychedelic music was conceived in its earliest days, focusing on people and events from 1965 that were important progenitors in developing and disseminating the genre. Those I discuss include individuals involved in an early psychedelic scene that formed in Virginia City, Nevada, as well as participants and developments related to a series of concerts held by the Family Dog commune in San Francisco.

In contrast to traditional forms of music analysis that place a heavy emphasis on form and harmony, this dissertation devotes considerable attention to the tone colors and production values that distinguished many psychedelic songs and albums from their predecessors in other genres of popular music. I also posit ways in which psychedelic

music can be better understood through various insights into the fascinating psychological processes through which the brain translates sound waves into the experience we call *music*. Over the past 30 years, the field of music cognition has made exciting progress in examining this phenomenon. In the 1980s, books such as Diana Deutsch's edited book *The Psychology of Music* (1982) and *Music Cognition* (1986) by W. Jay Dowling and Dane Harwood compiled and analyzed decades of research in an attempt to form some basic conclusions about these processes.¹⁶ Subsequent research further explored more specialized subcategories of cognition using modern methodologies.¹⁷ Today, researchers are exploring music cognition using the latest theories from the field of neuroscience, and conducting research using advanced technologies such as electroencephalography (EEG) and functional brain imaging (fMRI).¹⁸ To the best of my knowledge, however, the effects of psychoactive drugs have yet to be factored into this field. This is unfortunate, given that there are many genres of music that are commonly developed and appreciated under the influence of mind-altering substances.

In chapter four, I suggest an understanding of the experience and aesthetic of psychedelic music through psycho-aesthetic analysis, an approach that seeks to

¹⁶ Diana Deutsch, *The Psychology of Music*, 1st ed. (New York, NY: Academic Press, 1982); W. Jay Dowling and Dane L. Harwood, *Music Cognition* (Orlando, FL: Academic Press, 1986).

¹⁷ The second edition of Deutsch's book contains a lot of research from this era: Diana Deutsch, *The Psychology of Music*, 2nd ed. (San Diego: Academic Press, 1999). See also

¹⁸ Daniel J. Levitin, *This Is Your Brain on Music: The Science of a Human Obsession* (New York, NY: Dutton, 2006); Peter Nelson, Eduardo Reck Miranda, and Katie Overy, eds., *Exploring Music through Neuroscience* (Abingdon, UK: Routledge, 2009); Perry R. Cook, *Music, Cognition, and Computerized Sound: An Introduction to Psychoacoustics* (Cambridge, MA: MIT Press, 1999); Susan Hallam, Ian Cross, and Michael Thaut, *The Oxford Handbook of Music Psychology* (New York, NY: Oxford University Press, 2009).

understand the factors that determine aesthetic experience.¹⁹ Using the findings of scientific studies that pertain to the ways in which psychedelic drugs affect the experience of sound, music, and creativity, I illustrate the various ways in which psychedelic music and its performance can be understood to both emulate and enhance the experience of psychedelic drugs. In many respects, I consider the issue of drugs enhancing the experience of music to be similar to issues of historically-informed performance. Instead of focusing on the details of the musical sounds emanating from voices and instruments, however, it focuses on trying to understand how listeners have historically (and contemporarily for that matter) *experienced* them. While I acknowledge that surmising the musical experiences of others is a highly subjective practice, it is my hope that the theories I suggest in this chapter may someday be examined in a more scientific manner within the confines of a music cognition lab.

APPROACH TO THE RESEARCH OF POPULAR MUSIC

Much of the methodology employed in this dissertation is drawn from established practices within the field of historical musicology. Specifically, I use primary source information drawn from period publications, archive material, and secondary interviews to construct a historical narrative that chronicles the events, relationships, and paradigms that contributed to the birth of psychedelic music. In my attempt to establish this

¹⁹ For a discussion of this approach see Johan Wagemans, "Towards a New Kind of Experimental Psycho-Aesthetics? Reflections on the Parallelepiped Project," *i-Perception* 2, no. 6 (2011): 648-78.

narrative, I face certain challenges concerning the veracity of information due to the fact that the current narrative of psychedelic music is largely built upon loosely documented interviews conducted by rock biographers.

In some respects, the history of psychedelic music is an oft-embellished and thoughtlessly repeated oral history, the memory of which has admittedly often been obscured by the very substances I wish to study. The dissemination of these narratives, however, is no different from that of many other topics in music history: it is just in an earlier stage of the process through which oral histories are consolidated into “authoritative” texts. In musicological study concerning works from previous centuries, we generally give preference to information that stems from individuals who are closest in temporal, geographical, or social proximity to the subject in question.²⁰ We are even happier if we can correlate the information with an artifact or a second source that is independent of the first. But musicologists cannot deny that there are probably several accepted historical narratives that are the result of the repetition of a spurious oral history. The onus on my research is greater for three reasons: (1) I am temporally closer to the history, (2) there is more documentation available for fact checking than in earlier eras, and (3) the historiography of psychedelic music would greatly benefit from a concise and accurate account of events. My core strategy for writing in a field dominated by

²⁰ The critical approaches I cite here are described in greater detail in Georg Feder, *Music Philology: An Introduction to Musical Textual Criticism, Hermeneutics, and Editorial Technique* (Hillsdale, NY: Pendragon Press, 2011); Martha C. Howell and Walter Prevenier, *From Reliable Sources: An Introduction to Historical Methods* (Ithaca, NY: Cornell University Press, 2001); Valerie Raleigh Yow, *Recording Oral History: A Guide for the Humanities and Social Sciences*, 2nd ed. (Walnut Creek, CA: AltaMira Press, 2005).

entertainment-oriented rock biographies is to ensure that none of my core arguments rest upon facts that cannot be verified by another source.

In several instances, I discuss psychedelic music in relation to the various technologies that aided the creation and proliferation of certain aspects of the psychedelic aesthetic. Many of the definitive features of the psychedelic sound were the result of technological advances in studio equipment that occurred during the 1960s, which musicians and producers employed in innovative ways. This practice was particularly notable for producing novel tone colors, which I attempt to convey through descriptive language.

Lastly, I examine psychedelic music through an interdisciplinary lens, which utilizes research from music cognition, music therapy, psychology, and psychiatry. In doing so, I assert a more intimate relationship between psychedelic music and certain drugs. As an extension of this approach, I have also conducted a self-report study into people's experiences of music under the influence of marijuana, in an attempt to confirm and elaborate on previous self-report studies related to this subject. My study is specifically notable for attempting to explore marijuana in relation to specific facets of music appreciation. Given that this type of research is uncommon in musicology, this study was constructed in consultation with Catherine Caldwell-Harris, Ph.D., a member of the Boston University Department of Psychological and Brain Sciences, and was reviewed by the university's Institutional Review Board (IRB).

CHAPTER LIST

The following is a brief summary of the subsequent chapters that comprise this dissertation.

Chapter 1 – Development of the Psychedelic Concept and Culture

This chapter details the history of drug culture in the United States. It begins by discussing the history of non-medicinal drug use in this country in order to provide a context for the various popular attitudes about drugs that existed in the Sixties. It discusses the history of opium use and the evolution of the concept of addiction. The chapter continues by outlining societal efforts to legally control the consumption of psychoactive drugs through the creation of large anti-drug government agencies during the 1920s and 1930s. The history of the creation of LSD and rise in popularity of similar drugs, such as peyote and psilocybin, is then discussed in order to chronicle the means through which these substances and their influence spread through American society.

The chapter examines the shift that occurred in the understanding of the nature of some psychoactive substances. Specifically, the belief that certain drugs were capable of providing potentially beneficial “psychedelic” experiences. It then discusses the role of the Beat subculture in promoting the use of recreational drugs, specifically marijuana. It concludes with a discussion of important figures from the Sixties, such as Aldous Huxley, Ken Kesey, and Timothy Leary, as well as the various ways in which individuals in the Sixties ultimately came to understand psychedelic drugs.

Chapter 2 – Emergence of Psychedelic Music in California, Nevada, and Texas

This chapter details how the word “psychedelic” came to be used as a musical descriptor and how the music that bore this term came to exist.

It opens by exploring the various means through which music has traditionally come to be called “psychedelic.” Discussion then turns to the various genres of music that were predecessors to the psychedelic music of the Sixties, including surf rock, folk rock, and jazz. The evolution of the psychedelic music scene is then chronicled from early events that occurred during the summer of 1965 at the Red Dog Saloon in Nevada, to a series of concerts run by the Family Dog, to the establishment of Bill Graham’s Fillmore Auditorium and Chet Helms’s Avalon Ballroom. The narrative subsequently shifts to a lesser-known psychedelic scene that emerged in Austin, Texas, and a band called the 13th Floor Elevators, who were among the first to explicitly explore a philosophical relationship between music and psychedelic drugs. The chapter proceeds to outline the various technological innovations that were increasingly influencing psychedelic music by the mid-Sixties, and important studio works that were notable for exploiting them. Finally, it discusses a select group of albums that constitute the beginning of the mature psychedelic sound in the early months of 1967.

Chapter 3 – Effects of Psychedelic Drugs on Creativity and the Experience of Sound and Music

Chapter three provides a survey of the research that has been performed on the ways in which psychedelic drugs affect the experience of sound, music, and creativity. It specifically focuses on two drugs that have received significant attention from researchers: marijuana and LSD (the latter serving as a broad representative for similar serotonin-like psychedelic drugs). It examines results collected from scientific studies that have sought to investigate questions concerning these subjects through either self-report methodologies or more objective measures. It also details the results of a self-report study of marijuana and music that was conducted for this dissertation.

Chapter 4 – Psycho-Aesthetic Analysis of the Psychedelic Sound

This chapter details how the various findings outlined in chapter three can shed light on certain facets of psychedelic music. Specifically, it outlines the various ways in which many common musical features of psychedelic music can be understood to either emulate or enhance the subjective drug effects that were identified in the previous chapter. It concludes with three case studies in which the theories outlined at the beginning of the chapter are employed to perform a psycho-aesthetic analysis of the music, which uses scientific findings to suggest ways in which the music *could* be experienced by the listener.

A WORD ABOUT AMERICAN DRUG CULTURE

Historical literature concerning the Sixties can sometimes unintentionally endorse the notion that American drug culture began in that decade. While it is true that a new and prominent drug culture emerged in the 1960s, the history of non-medicinal drug use in this country is far older and more complex than is sometimes understood by the general readership. The Sixties drug culture that receives so much attention today was very much a development among white, middle- to upper-class Americans. While marijuana and other powerful psychoactive drugs may have been new to many Americans of European descent, many of these drugs had a long, established presence among blacks, Latinos, and Native Americans living in the United States. In this way, there were many active drug cultures in the United States that existed prior to the one that is the focus of this dissertation.

History teaches that few if any cultures exist in a vacuum. One cannot help but wonder about the degree to which the drug cultures of different ethnic groups interacted and influenced one another. Indeed, some Americans of European descent seem to have sampled the drug practices of other cultures.²¹ But documentation of these types of events is rather scarce. Arguably the largest interaction between ethnic drug cultures occurred between black jazz artists and the predominantly white Beat subculture that fervently admired the music and lifestyle of these musicians. Indeed, this dissertation details the extent to which the jazz-loving Beats were important progenitors of Sixties drug culture

²¹ See for example: Carl Lumholtz, *Unknown Mexico* (New York, NY: Scribners, 1902), 358.

and attempts to acknowledge contributions made by the drug cultures of other ethnic minorities whenever possible. Many of these cross-cultural exchanges have yet to be explored, however, and were ultimately beyond the scope of this dissertation's research. In this way, I believe a true multicultural history of non-medicinal drug use in the United States is still waiting to be told.

CHAPTER 1

DEVELOPMENT OF THE PSYCHEDELIC CONCEPT AND CULTURE

THE CULTURAL CONTEXT OF PSYCHEDELIC MUSIC

Over the course of the 1960s, Americans became deeply divided over the recreational use of certain psychoactive drugs. Proponents of drugs like LSD perceived these substances to be a way of addressing some of humanity's greatest challenges, while their critics held that the substances were eroding the psychological and moral capacities of an entire generation of young Americans. The dominant factions of American society ultimately sided with the latter position, and waged a social and legal battle against advocates of the former viewpoint, which silenced some Americans and put others in jail. The term "psychedelic," which was applied to the music that is the focus of this dissertation, embodied the beliefs of those who held that psychedelic drugs had the capacity to be highly beneficial. In this way, psychedelic music was intrinsically entangled in an intense societal conflict that affected the lives and well-being of its participants from its very conception. In my opinion, considering psychedelic music without an understanding of this conflict would be similar to contemplating blues music outside the context of slavery and racial discrimination, or certain traditions of Jewish music without knowledge of the Diaspora. The purpose of this chapter is, therefore, to help the reader understand the various ideological lenses through which Americans in the Sixties understood drugs, and the disparate ways in which drug-influenced music was received. It also provides a more detailed social context for the events of the following chapter, discussing individuals who were not musicians, but nevertheless important, well-known figures in the larger psychedelic scene.

A BRIEF HISTORY OF PSYCHOACTIVE DRUGS IN THE WESTERN WORLD

When psychedelic drugs such as marijuana, LSD, and psilocybin mushrooms began receiving attention from the American public in the 1960s, ideas concerning these drugs and the effects of their consumption were informed by many ideas that stemmed from earlier cultural conflicts surrounding substances that alter behavior. Given the impact of these pre-existing notions upon the reception of psychedelic ideas and, in turn, psychedelic music, I will briefly survey some key developments that informed the social context into which the philosophies of figures such as Aldous Huxley, Ken Kesey, and Timothy Leary were received. Specifically, I will discuss earlier controversies in the United States surrounding opium, alcohol, and marijuana.

It should be noted that I will not discuss the history of peyote (mescaline), a small button-shaped cactus that grows in Mexico and the Southwestern United States, which has similar effects to LSD and psilocybin. This substance has been consumed by Native Americans for thousands of years and was one of the first psychedelic drugs to be widely consumed in North America.²² Historical reports of the drug's usage by Westerners are generally scant and anecdotal. In this way, peyote's historical influence on Americans of European and African descent—while probable—is difficult to ascertain. Colonial pharmacologists were certainly aware of its existence, and the drug was sampled by some

²² See Omer Call Stewart, *Peyote Religion: A History*, 1st ed., The Civilization of the American Indian Series (Norman, OK: University of Oklahoma Press, 1987).

adventurous Europeans, such as Antonin Artaud.²³ Additionally, in his 1902 ethnography of Mexico, Carl Lumholtz relays the story of a Union army officer who claimed that captured Texas Rangers—deprived of alcohol—had consumed peyote buttons.²⁴ While peyote was consumed by some important figures in the Sixties who are discussed in this dissertation, I did not encounter evidence this practice was substantially influenced by Native American traditions. Instead, peyote seems to have been an easily accessible psychedelic substance for individuals living in or near arid climates. For this reason, the larger history of peyote in the United States is omitted from the following discussion.

Nineteenth Century

Opium Addiction

It can be argued that the modern concept of a narcotic drug stems directly from the West's struggle with opium. Opium was being imported into Europe from Eastern nations as early as antiquity, and for much of history it was treated like any other commodity. In the fourteenth century, the Holy Inquisition prompted widespread condemnation of opium use in Europe, fuelled by the church's hatred of the drug's origins in the East.²⁵ The Inquisition's scorn for opium was so strong that mention of it all but disappears in surviving European texts from the following two centuries. By the

²³ Deborah Caplow, *Leopoldo Méndez: Revolutionary Art and the Mexican Print*, 1st ed. (Austin, TX: University of Texas Press, 2007), 268.

²⁴ Lumholtz, *Unknown Mexico*, 358.

²⁵ Peter Lee, *The Art and Ritual of the Chinese Tradition* (Rochester, VT: Park Street Press, 2006), 220.

seventeenth century, medicinal use of opium had once again become acceptable in Europe, though excessive or recreational consumption was still stigmatized as uncivilized behavior. Indeed, the discussion of opium use outside of Europe in eighteenth century anthropological publications, such as *The Memoirs of Baron de Tott* (1786) or Alexander Russell's *A Natural History of Aleppo* (1756), portray opium eating as a custom of primitive peoples who had succumbed to the immoderate use of poison.²⁶

The Industrial Revolution ushered in a new era of increased opium consumption in the West. New methods of processing opium made the drug available as an ingredient in an endless array of preparations including opiate electuary, powder of chalk with opium, opiate confection, Dover's Powder, tincture of soap and opium, liquorice troches with opium, vinegar of opium, laudanum (a mixture of opium and alcohol), paregoric elixir, and opium-based throat lozenges and cordials, as well as pure opium which was commonly sold in pills or "penny sticks." Moreover, many local chemists often formulated and sold their own unique opium-based concoctions.²⁷ In Britain, these unregulated products could be purchased from general stores, market stalls, or from salesmen who sold the drug throughout the English countryside.²⁸

In the first half of the nineteenth century, few Europeans seemed to perceive opium as a societal malaise. This was, in part, due to the fact that drug addiction was not universally recognized within the medical community. The prevailing belief understood

²⁶ François Tott, *Memories of the Baron De Tott* (London, UK: J. Jarvis, 1785); Virginia Berridge, "Victorian Opium Eating: Responses to Opiate Use in Nineteenth-Century England," *Victorian Studies* 21, no. 4 (1978): 442.

²⁷ Berridge, "Victorian Opium Eating: Responses to Opiate Use in Nineteenth-Century England," 440.

²⁸ *Ibid.*: 438.

addiction as either a personal deficit or an intemperate habit. In the words of Dr. William Huntley, a noted member of the Society for the Study of Inebriety, “[the addict] drives a dangerous animal, and at his peril, but he still drives.”²⁹ It was not until later in the nineteenth century that concerns about opium and the dangers of addiction began to emerge. One factor that seems to have played a role in drawing public attention to the drug was Thomas De Quincey’s *Confessions of an English Opium-Eater* (1821). The work’s impassioned prose and vivid descriptions of opium dreams made the work immensely successful and earned the publication a series of enthusiastic reviews from 1821 to 1823.³⁰ De Quincey anonymously published the work in two installments entitled “The Pleasures of Opium,” which discussed the surreal effects of the drug, and “The Pains of Opium” which explored the struggle of addiction and the horrors of opium-induced nightmares. Notably, *Confessions* was not by any means a purely cautionary tale, as throughout the work De Quincey arguably romanticized both the effects of the drug as well as the struggle between opium and its user.³¹ To compensate for what some believed to be an “overbalance on the side of the *pleasures* of opium,” De Quincey added an appendix to *Confessions* that chronicled, in unembellished prose, the physical suffering that opium had inflicted upon his body.³² Still, some blamed De Quincey for increasing opium abuse. An English physician testifying at an 1823 inquest into the opium overdose of a young man claimed that he knew of four instances in which an opium overdose was

²⁹ William Huntley, “Opium Addiction, Is It a Disease?” *Proceedings of the Society for the Study of Inebriety* 50 (1896): 9.

³⁰ Terry M. Parssinen, *Secret Passions, Secret Remedies: Narcotic Drugs in British Society, 1820-1930* (Philadelphia: Institute for the Study of Human Issues, 1983), 5.

³¹ *Ibid.*

³² *Ibid.*, 6.

inspired by a book “published by a man of literature which recites many extraordinary cases of taking opium,” and noted that “almost every young man of practice and science had been induced to purchase this work,” which he considered of “universal ill tendency.”³³

In the United States, it is estimated that approximately three percent of the population was addicted to opiates by 1900. The growing prevalence of this problem was enough to make the general public wary of the dangers of substance abuse.³⁴ Many Americans blamed the rise of opium addiction on the Chinese immigrants they called “yellow peril,” who had been arriving on the West Coast in large numbers since the Gold Rush of 1849. The East India Trading company—with the help of the British military—had been forcing large quantities of opium into China, and addiction to the drug had become a major problem in that country. Historians generally believe these accusations to have been unfounded, however, and hold that most Americans were exposed to the drug through European medicinal preparations.³⁵ Eventually, laws were passed to regulate the sale of opium. The city of San Francisco was among the first to enact such a law in 1875, with many state legislatures following suit until a general ban on opium was enacted by the United States Congress in 1905.

³³ Grevel Lindop, *The Opium-Eater: A Life of Thomas De Quincey* (New York, NY: Oxford University Press, 1985), 248.

³⁴ Martin Booth, *Cannabis: A History*, 1st U.S. ed. (New York, NY: St. Martin's Press, 2004), 127.

³⁵ *Ibid.*, 128.

Hashish

Marijuana is another drug that began to spread in the Western world during the nineteenth century. Though its usage was not as widespread, its early history in the West shares much in common with opium.

As a durable crop capable of growing in many conditions, marijuana has a long history of use by humans that dates back to at least 8,000 BCE.³⁶ Historically, most marijuana has been cultivated in order to create hemp products from the plant's seeds, oil, and fibrous stalks. Most of these crops contained only low levels of tetrahydrocannabinol (THC) and other psychoactive cannabinoids. Marijuana plants containing high levels of psychoactive cannabinoids were first documented in China around 2737 BCE where they were used in a medicinal capacity to treat various ailments.³⁷ The use of highly psychoactive strains of marijuana were later mentioned in the Indian *Atharvaveda* (1400 BCE) as holy plants that could relieve stress.³⁸ By 1200 CE, mention of marijuana's intoxicating properties was increasingly made in literary works, a notable example being the story "The Tale of Two Hashish Eaters" in *1,001 Nights*. Like opium, marijuana was subject to intense scrutiny during the Holy Inquisition. Convinced that marijuana was a sacrament in the celebration of the black or satanic mass, Pope Innocent VIII banned its ritualistic consumption.³⁹

³⁶ Mitchell Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence* (New York, NY: Oxford University Press, 2002), 4.

³⁷ *Ibid.*, 9.

³⁸ *Ibid.*, 16.

³⁹ Booth, *Cannabis: A History*, 92.

Knowledge of the plant's intoxicating properties gradually spread throughout Europe, and in 1798 several of Napoleon's soldiers brought the plant to France from Egypt.⁴⁰ In the mid-1840s, the French physician Jacques-Joseph Moreau explored the drug's capacity to treat mental illness, and also supplied it to many French artists and writers who were members of the *Club des Hashischins*. Moreau's experimentation with marijuana is notable as it constitutes one of the earliest known instances of Westerners consuming the drug for the purpose of artistic inspiration.⁴¹ By mid-century, interest in the drug's medicinal properties by physicians such as Moreau led to potent psychoactive marijuana products becoming widely available as treatments for pain, inflammation, coughing, and other ailments.⁴²

In the United States, the history of marijuana dates back to Jamestown where settlers grew the plant for the purpose of producing hemp products.⁴³ Two of the earliest mentions of psychoactive marijuana by American authors came in 1854. One of these references was made by John Greenleaf Whittier in his anti-slavery poem *The Haschish*, the other by Bayard Taylor's in his account of traveling through Africa.⁴⁴ Around this time, the practice of consuming marijuana both for medicinal and "inspirational"

⁴⁰ Rowan Robinson, *The Great Book of Hemp: The Complete Guide to the Environmental, Commercial, and Medicinal Uses of the World's Most Extraordinary Plant* (Rochester, VT: Park Street Press, 1996), 79. Recipients included Theophile Gautier, Charles Baudelaire, and Alexander Dumas.

⁴¹ Ibid.

⁴² Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence*, 5.

⁴³ Booth, *Cannabis: A History*, 57. Though many settlers preferred to grow more lucrative tobacco crops, in 1611 King James I mandated the cultivation of hemp and flax in all English colonies (See Booth 57).

⁴⁴ Bayard Taylor, *A Journey to Central Africa (Life and Landscapes from Egypt to the Negro Kingdoms of the White Nile)*, 10th ed. (New York, NY: G. P. Putnam, 1854); ———. "The Lands of the Saracen (Pictures of Palestine, Asia Minor, Sicily, and Spain)." (Place Published: G. P. Putnam & co., 1863), <http://name.umd.umich.edu/AHZ0632>.

purposes began to spread across the Atlantic. Some of the most popular texts on marijuana from this period were written by Fitz Hugh Ludlow of Poughkeepsie, New York.⁴⁵ Ludlow had been inspired by the writings of Taylor and began his own experimentation with marijuana. He subsequently published an autobiographical account in a book entitled *The Hashish Eater* (1857), which enjoyed wide and enduring circulation.⁴⁶ Ludlow's depiction of marijuana was not entirely pleasant, which was seemingly a desire to follow literary precedents set by De Quincey's in *Confessions*. Indeed, Ludlow was very fond of De Quincey's work and acknowledged his influence in the preface to *The Hashish Eater*.⁴⁷ Just as De Quincey suffered a conflict between the "pleasures of opium" and "pains of opium," Ludlow and others seems to construct a similar dichotomy for their understanding of marijuana. His experience of marijuana may have also been affected by the manner in which he consumed the drug. Ludlow writes of ingesting marijuana in the form of edible hashish.⁴⁸ When taken in this manner, it can be very hard to regulate one's level of intoxication, since there is usually a significant delay between when one ingests marijuana and when he or she experiences the actual effects of the portion consumed.⁴⁹ In short, it is possible that Ludlow was experiencing very high dosages of marijuana, which can produce high levels of anxiety in users.⁵⁰

⁴⁵ Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence*, 23.

⁴⁶ Fitz Hugh Ludlow, *The Hasheesh Eater: Being Passages from the Life of a Pythagorean*, (New York, NY: Harper & Brothers, 1857); Ernest Abel, *Marihuana: The First Twelve Thousand Years* (New York, NY: Plenum, 1980), 177.

⁴⁷ Ludlow, *The Hasheesh Eater: Being Passages from the Life of a Pythagorean*, vi.

⁴⁸ *Ibid.*, 18.

⁴⁹ This is in contrast to smoking in which the effects of the drug when inhaled are often experienced more quickly.

⁵⁰ Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence*, 114.

By the 1870s, stories of hashish parlors began to emerge in American newspapers, which portrayed the establishments as being both degenerate and prevalent in major U.S. cities.⁵¹ Marijuana historian Martin Booth believes these depictions to be inaccurate, however. According to his research, though parlors did exist in major American cities, they tended to be private venues that were secretly patroned by the affluent.⁵² While the drug was still legal, its consumption seems to have nevertheless carried a stigma.⁵³

Early Twentieth Century

Thus far, I have abstained from using the term “recreational” to describe the non-medicinal drug use of individuals such as De Quincy, Ludlow, and others. While people living in the nineteenth century undoubtedly consumed psychoactive substances for a variety of reasons, those that recorded their experiences seem to have had a relationship with drugs that is incongruent with the connotations of the contemporary phrase “recreational drug use.” The accounts of individuals from this era seldom portray marijuana and opium as pleasurable drugs. Instead, they depict them as substances that destabilize an individual’s well-being and foster fear and anxiety while acknowledging their capacity to provide surreal experiences and novel insights. Ludlow’s description of the drug in *The Hashish Eater* sums up this relationship quite well. He acknowledges

⁵¹ For example, see Harry Hubbell Kane, “A Hashish-House in New York: The Curious Adventures of an Individual Who Indulged a Few Pipefuls of the Narcotic Hemp,” *Harper's Monthly Magazine*, November 1883.

⁵² Booth, *Cannabis: A History*, 150.

⁵³ *Ibid.*, 148.

marijuana to be a unique substance through which one may explore “the soul’s capacity for a broader being, deeper insight, grander views of Beauty, Truth and Good than she now gains through the chinks of her cell”; but concludes the book by warning the reader: “Ho there! Pass by; I have tried this way; it leads at last into poisonous wildernesses.”⁵⁴

Prohibition

On the doorstep of the Roaring Twenties, Americans became increasingly concerned about the use of a specific drug and the behavior it produced. This drug had a long history of accepted recreational use, and—to this day—mysteriously avoids being called a “drug.” Instead, it is casually referred to as “alcohol.”

Beginning in Colonial times, many localities in the United States had laws controlling the consumption of alcohol. In some instances, these laws prohibited drinking entirely. In others, the restrictions only applied to certain demographics that were considered to be a social risk, such as black slaves, Indians, indentured servants, and apprentices.⁵⁵ In the mid-nineteenth century, the United States, like its counterpart England, witnessed a widespread temperance movement, which eventually led to calls for federal prohibition laws. This movement was largely led by the new wave evangelical Christians who collectively comprised the Second Great Awakening. This new brand of Protestant Christianity preached a gospel that focused much of its attention on applying

⁵⁴ Fitz Hugh Ludlow and David M. Gross, *The Annotated Hashish Eater* (CreateSpace Independent Publishing Platform, 2007), xvii, 218.

⁵⁵ Richard Wightman Fox and James T. Kloppenberg, *A Companion to American Thought* (Cambridge, MA: Blackwell Publishers, 1995), 550.

the teaching of the New Testament to the social issues that were facing the United States. In their eyes, the consumption of alcohol was an ungodly habit that should be ended in order to preserve social order and demonstrate the higher morality of the American citizen.⁵⁶ Though this early prohibition movement had a few successes, such as a short-lived prohibition law in Maine, it ultimately waned following the outbreak of the American Civil War.⁵⁷

It was not until the late 1910s that support for prohibition witnessed a resurgence, as American evangelicals united with a new wave of secular urban reformers. These reformers, led by figures such as John R. Commons and Edward A. Ross, promoted prohibition on the basis of scientific research that evidenced the considerable physical and social harm caused by alcohol. Women's organizations resumed their promotion of the belief that liquor negatively impacted family life; white southerners (and Booker T. Washington) argued that prohibition would lead to less interracial violence; labor reformers asserted alcohol as a proponent of poverty; and political reformers portrayed saloons as cogs in the corrupt machinery of party politics.⁵⁸ There were also many xenophobic motivations behind the new push for prohibition. Many Americans feared the cultural impact of European immigrants who were arriving on America's shores in increasingly larger numbers following the First World War. There was also a belief among the American public that a large portion of the liquor industry was German and should not be supported by U.S. consumers.⁵⁹ On January 16, 1919, the 18th Amendment

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Ibid., 550-51.

was ratified, which effectively prohibited the consumption of alcoholic beverages by banning the production, transportation, and sale of alcohol for all but medical and religious purposes. Fourteen years later, this policy came to be seen as an abject failure by the American public, and Congress passed the 21st amendment to officially repeal prohibition.

The events surrounding prohibition have usually been understood outside the history of drugs, largely due to the fact that many Americans and Europeans do not perceive alcohol as a drug. Prohibition is an important chapter in this narrative, however. It is the first time in American history that the federal government undertook a large-scale, nationwide campaign to control the behavior of individuals behind closed doors. While earlier laws prohibiting “sodomy,” polygamy, and other taboo acts were similar in spirit, none were enforced as broadly and systematically as the 18th Amendment. Prohibition was also one of the largest campaigns to date that sought to prevent the consumption of a substance. Moreover, like other drug laws in the twentieth century, it inadvertently fueled the creation of an illegal supply industry, which many came to see as a bigger problem than the substance itself. In this way, prohibition set many precedents that would inform the response of the American mainstream to other drugs in the decades ahead.

Marijuana “Reefer Wars”

When the 18th Amendment was repealed, the government infrastructure created to enforce prohibition redirected its attention to marijuana. In the mid-1930s, the Federal Bureau of Narcotics and its commissioner, Harry Anslinger, led an impassioned campaign against the drug. Anslinger, aided by like-minded politicians and social advocates, engaged in a media campaign to convince the public that organized crime was preying upon American teenagers and turning them into wayward marijuana addicts. Newspaper magnate William Randolph Hearst would sometimes give Anslinger space in his papers to disseminate his anti-marijuana propaganda. In these columns, Anslinger shared cautionary stories of drug-crazed teens committing acts of violence or sexual deviancy:

An entire family was murdered by a youthful addict in Florida. When officers arrived at the home, they found the youth staggering about in a human slaughterhouse. With an axe he had killed his father, mother, two brothers, and a sister. He seemed to be in a daze... He had no recollection of having committed the multiple crimes. The officers knew him ordinarily as a sane, rather quiet young man; now he was pitifully crazed. They sought the reason. The boy said that he had been in the habit of smoking something which youthful friends called “muggles,” a childish name for marijuana.⁶⁰

In relating stories concerning sexual immorality, he often reinforced marijuana’s association with non-whites to exploit the racial prejudices of the American public:

Colored students at the Univ. of Minn. partying with (white) female students, smoking [marijuana] and getting their sympathy with stories of racial persecution [...] Two Negroes took a girl fourteen years old and kept

⁶⁰ Harry J. Anslinger and Ryley Cooper, “Marijuana: Assassin of Youth,” *American Magazine*, July 1937.

her for two days under the influence of hemp. Upon recovery she was found to be suffering from syphilis.⁶¹

Notably, Anslinger's propaganda did not deny that marijuana *could* yield interesting and pleasant effects, yet it firmly held that the drug's effect on the user was ultimately unpredictable and potentially dangerous:

No one can predict [marijuana's] effect. No one knows, when he places a marijuana cigarette to his lips, whether he will become a philosopher, a joyous reveler in a musical heaven, a mad insensate, a calm philosopher, or a murderer.⁶²

As with prohibition, there were also many private initiatives against marijuana. Some of the more interesting examples of these efforts are cautionary films from Hollywood, such as *Reefer Madness* (1936) and *The Assassin of Youth* (1937), which told stories of criminal purveyors of marijuana preying upon the innocent curiosities of wholesome American youth.

In the end, the campaign was successful in establishing strict government regulation of marijuana through the *Marijuana Tax Act* of 1937. The drug would technically remain legal—though largely inaccessible—until its outright prohibition in the *Boggs Act* (1951).⁶³

There is little evidence that a “marijuana problem” existed in the United States during the first half of the twentieth century. In 1944, the New York Academy of Medicine gathered a group of professionals who became known as the LaGuardia Committee to study marijuana and its prevalence in New York City in order to evaluate

⁶¹ Paul Finkelman, *Encyclopedia of American Civil Liberties* (New York, NY: Routledge, 2006), 64.

⁶² Anslinger and Cooper, “Marijuana: Assassin of Youth.”

⁶³ Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence*, 23-24.

the claims being made by Anslinger and others. Among its many findings, most of which asserted the harmlessness of the drug, was the conclusion that consumption of the drug was largely confined to black and Latino adults—not white school children as argued by critics. The assertion that marijuana use was not widespread among young people has been further supported by more recent research, which supports the notion that marijuana usage did not pick up until mid-century.⁶⁴

There are many who believe that the campaign against marijuana in the 1930s was largely the result of two factors. The first was a fear of the Mexican immigrants who had fled to the United States in large numbers following the Mexican Revolution of 1910. These migrants brought many customs with them to the United States, including their recreational use of marijuana.⁶⁵ The second was lobbying against marijuana by the logging and synthetic fiber industries. Indeed, William Randolph Hearst, the man who published much of Anslinger’s propaganda, had extensive holdings in timber. Andrew Mellon, then Secretary of the Treasury Department that funded and oversaw Anslinger’s Federal Bureau of Narcotics, had invested heavily in DuPont and its new synthetic fiber “nylon,” which was in direct competition with the hemp being farmed across the country.⁶⁶

The Anslinger campaign embedded two notions within the American psyche that would influence future events. The first was the association of marijuana with criminal

⁶⁴ U.S Department of Health and Human Services (HHS) Office of Applied Studies, *Trends in the Incidence of Drug Use in the United States, 1919-1992* by R. Johnson, (Rockville, MD: 1996), 86.

⁶⁵ Booth, *Cannabis: A History*, 131.

⁶⁶ Richard Isralowitz, *Drug Use: A Reference Handbook*, Contemporary World Issues. (Santa Barbara, CA: ABC-CLIO, 2004), 178.

elements within the United States—an easy narrative to accept after Prohibition. The second was the portrayal of marijuana as a recreational drug that could be highly *pleasurable* and addictive for its users. This depiction of recreational use seems to have borrowed heavily from the established understanding of the recreational use of alcohol. Indeed, in the cautionary films released during this period, actors portraying the effects of marijuana often act as though they are drunk rather than high. Nevertheless, this latter notion was in sharp contrast to the drug’s portrayal in the writings of Ludlow and would have a lasting impact on the way marijuana and other psychoactive drugs were perceived in future decades.

This brief survey of the early history of psychoactive drugs in the United States reveals much about American’s attitudes towards these substances. First and foremost, the intimate historical relationship between xenophobia and the fear of drugs. Americans’ fear of drugs was often closely related to their fear of immigrants, be it the Chinese immigrants and opium, European immigrants and alcohol, or Latino immigrants and marijuana. In these instances, Americans perceived the substance in question to be a dangerous agent of a foreign culture that weakened domestic cultural norms and reified the behaviors of the immigrants among their own people—especially those who were young or “vulnerable.” This history also represents the many precedents that were set during Prohibition. In the nineteenth and twentieth centuries, many of the prominent initiatives to control behavior in the United States were joint efforts led by Christian social conservatives and secular social engineers. The former, opposing drugs on the grounds that they illicit immoral behaviors that contradict biblical teachings; the latter, on

the basis that the substances are scientifically proven to disrupt the education, productivity, social order, and health of the societies they are attempting to architect. This broad view of history also evidences the futility of prohibition, especially in the United States where attempts to control consumption and behavior have historically clashed with the country's founding principles of individual liberty. In most instances the continued—and in some instances increased—demand for these substances led to the formation of a black market and inadvertently increased the exposure of vulnerable populations to them. Indeed, in the twenty-first century, the American public seems to be growing weary of the war on drugs, much like Americans in the 1930s grew tired of Prohibition.

THE EMERGENCE OF THE PSYCHEDELIC PARADIGM

The Fifties witnessed the emergence of a new paradigm for understanding psychoactive drugs. It originated in the American literary community and gradually spread to Western popular culture. Central to the emergence of this paradigm was the discovery of *lysergic acid diethylamide* (LSD) in 1943, and the subsequent struggle to understand its fantastic effects on human perception.

William James and Nitrous Oxide

At the turn of the century, William James, a Harvard University professor who specialized in psychology and philosophy, delivered a series of lectures at the University

of Edinburgh from 1901 to 1902. An edited edition of these lectures was later published in 1902 under the title *The Varieties of Religious Experience: A Study of Human Nature*.⁶⁷ In these writings, James discusses his personal experiences with ether and nitrous oxide gas (laughing gas), which was a common anesthetic in his time:

Nitrous oxide and ether, especially nitrous oxide, when sufficiently diluted with air, stimulate the mystical consciousness in an extraordinary degree. Depth beyond depth of truth seems revealed to the inhaler [...] One conclusion was forced upon my mind at that time, and my impression of its truth has ever since remained unshaken. It is that our normal waking consciousness, rational consciousness as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence; but apply the requisite stimulus, and at a touch they are there in all their completeness, definite types of mentality which probably somewhere have their field of application and adaptation. No account of the universe in its totality can be final which leaves these other forms of consciousness quite disregarded.⁶⁸

This discussion is possibly the earliest attempt by a Western intellectual to articulate not only the beneficial effects of a psychoactive substance, but their value and relationship to human consciousness. In his writings, James eloquently asserts the core tenet of the psychedelic concept: that certain drugs have the capacity to provide a greater understanding of existence. This idea ultimately failed to germinate in the 1900s, and was lost in the book's larger arguments concerning science, religion, and phenomenology. The failure of these ideas to flourish may be attributed, in part, to the fact that few in the Western world had access to these gasses or similar substances. In short, James's theses on the value of drugs would not resonate until Western culture encountered a new class

⁶⁷ William James, *The Varieties of Religious Experience: A Study in Human Nature* (New York, NY: Longmans, Green, & Co., 1902).

⁶⁸ *Ibid.*, 378.

of hallucinogenic drugs, which made the merits of his arguments abundantly clear to many people. Chief among these drugs was the chemical LSD.

The Discovery of LSD

The story of LSD begins in the 1930s with a 37-year-old chemist named Albert Hofmann. Hoffman was researching the medicinal properties of ergot, a fungus which grows on rye bread, for the Sandoz pharmaceutical company in Basel, Switzerland. During the Middle Ages, ergot-contaminated bread resulted in outbreaks of St. Anthony's Fire, an often fatal disease that caused convulsions and gangrene-like loss of fingers and toes. By the 1500s, midwives were using small amounts of ergot medicinally to speed uterine contractions and slow the loss of blood during childbirth. Hofmann spent eight years synthesizing variations of lysergic acid, the active ingredient in ergot, in hopes of producing a cure for migraines. Hofmann first produced his 25th synthesis of lysergic acid (LSD-25) in 1938 but did not notice anything special about it and moved on to his next formulation. Five years later, Hofmann became suspicious that he had missed something when testing LSD-25 and decided to revisit this synthesis.⁶⁹ Decades later, LSD advocates would note that only a few months earlier, scientists working on the Manhattan Project succeeded in creating the first self-sustaining nuclear chain reaction in a secret laboratory under a football field at the University of Chicago—a breakthrough

⁶⁹ Annelie Hintzen, Torsten Passie, and Beckley Foundation, *The Pharmacology of LSD: A Critical Review* (Oxford, UK: Oxford University Press, 2010), 3.

that ultimately brought nuclear weapons into the world. In their eyes, Hoffman's somewhat odd decision to return to LSD-25 was the serendipitous enactment of the will of Mother Nature to give humanity an antidote that would counteract the dangers and fears of the nuclear age with a broader understanding of existence.⁷⁰

On April 16th, 1943, Hofmann created a fresh batch of LSD-25. He began to feel ill soon after completing it and decided to leave work early. Upon returning home, Hofmann experienced an "uninterrupted stream of fantastic pictures, extraordinary shapes with intense, kaleidoscopic play of colors." Over the weekend, he concluded that his experience had been caused by the chemical he created, which he had handled without gloves. On Monday, April 19, he tested his theory by taking a larger dose under the supervision of an assistant, and took a ride on a white bicycle that became a legend in psychedelic folklore.⁷¹

In 1947, Sandoz began distributing LSD to researchers worldwide under the trademark Delysid ®. Sandoz initially recommended psychiatrists self-administer the drug in order to gain an understanding of the subjective experiences of psychotic patients. The company also asserted that LSD was a potential means for neurotic patients to release repressed thoughts and feelings. Initially, many psychiatrists believed that LSD was an artificial means of inducing schizophrenia, though this understanding was abandoned as research into the drug's effects progressed.⁷²

⁷⁰ DeRogatis, *Turn on Your Mind: Four Decades of Great Psychedelic Rock*, 2.

⁷¹ Albert Hofmann, *LSD, My Problem Child* (New York, NY: McGraw-Hill, 1980), 47.

⁷² Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 4.

Aldous Huxley, Humphrey Osmond, and the Coining of the term “Psychedelic”

Two important figures in the development of the understanding of LSD and other psychedelic drugs that eventually became widespread were author Aldous Huxley and a British psychiatrist named Humphrey Osmond. In 1953, Osmond administered a dose of mescaline—a drug with very similar effect to LSD—to Aldous Huxley in Los Angeles after the author had volunteered himself as a test subject.⁷³ In 1954, Huxley published his experience with the drug in *The Doors of Perception*. In this essay, Huxley asserted that drugs like mescaline permitted the user to access his or her “Mind at Large,” a state of consciousness in which one may appreciate thoughts, feelings, and sensations that the brain normally filters out because they are not relevant to homeostasis. Huxley’s theories quickly spread through popular culture and facilitated a significant paradigm shift in the way Americans understood these substances. Whereas drugs like mescaline had previously been conceptualized as substances that *inhibited* one’s brain like a mental illness, Huxley argued that they enabled *new* functions by disabling its “reducing valves.”⁷⁴ By 1955, Huxley had sampled LSD, and both he and Osmond felt that a new word was required to describe these drugs and their unique effect on human consciousness. In a 1956 letter to Osmond, Huxley suggested the name *phanerothyme* meaning “revealing the soul,” and included a short poem:

To make this trivial world sublime,
Take a half a Gramme of phanerothyme.⁷⁵

⁷³ Janice Hopkins Tanne, “Obituary for Humphry Osmond,” *British Medical Journal* 328, no. 7441 (2004): 713.

⁷⁴ Huxley, *The Doors of Perception and Heaven and Hell*, 23-24.

⁷⁵ Allan A. Metcalf, *Predicting New Words: The Secrets of Their Success* (Boston, MA: Houghton Mifflin, 2002), 53.

Not quite sold, Osmond countered with his own word, *psychedelic*, drawing from the Greek words *psyche* for mind or soul, and *deloun* for show:

To fathom hell or soar angelic,
Just take a pinch of psychedelic.⁷⁶

Huxley apparently accepted this suggestion, and by 1957 Osmond was using the term at conferences and in scientific papers.⁷⁷

Huxley went on to serve as a passionate advocate for psychedelic drugs until his death in November of 1963. Huxley hoped that the experience of LSD and its educational value would become a regular facet of intellectual life. He complained that Western education had been hindered by its heavy reliance on the medium of language, and saw psychedelic drugs as the basis of a field of “non-verbal humanities,” which he described as the “arts of being directly aware of the given facts of our existence.”⁷⁸

Though Huxley’s vision was never realized on an institutional level, his eloquent theses on psychedelic experience and its educational merits formed the intellectual foundation of Western drug culture, and both fulfilled and expanded upon the epiphanies William James’s shared in *The Varieties of Religious Experience*.

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Huxley, *The Doors of Perception and Heaven and Hell*, 76.

Dissemination of LSD

While Huxley and Osmond codified the psychedelic paradigm that defined intellectual drug culture, there were several individuals and entities in the Fifties that played prominent roles in disseminating psychedelic drugs, permitting the American public to experience psychedelic states for themselves.

One such figure was Alfred Matthew Hubbard. A self-described “country boy” from Kentucky, “Captain” Hubbard was by all accounts a mysterious figure who purportedly invented an “atmospheric power generator” as a teenager, spent time in jail for rum-running during Prohibition, and facilitated the secret shipment of war supplies up the West Coast to Canada in the early years of World War II—presumably on the payroll of a clandestine government agency. By the mid-Fifties, Hubbard was a powerful industrialist who was President of the Vancouver Uranium Corporation and had extensive connections within the inner circles of Washington.⁷⁹ In addition to his business interests, Hubbard was an ardent Catholic who had sustained a lifelong interest in mysticism and what he called “the other world.” He reached out to Huxley and Osmond after having an experience on mescaline, which convinced him that the drug was destined to revolutionize human existence. Upon learning of LSD, Hubbard used his connections to acquire large amounts of the drug directly from Sandoz, and reportedly would boast that he had stockpiled more LSD than anyone else in the world. In the latter half of the 1950s,

⁷⁹ Jay Stevens, *Storming Heaven: LSD and the American Dream*, 1st ed. (New York, NY: Atlantic Monthly Press, 1987), 55.

Hubbard became known as the “Johnny Appleseed of LSD” for his ceaseless proliferation of the drug.⁸⁰ According to some sources, Hubbard introduced close to 6,000 prominent American intellectuals, artists, and politicians to LSD.⁸¹ He is purported to have presented the drug as a religious experience to newcomers, suggesting that it gave beatific visions akin to those of Christian Saints.⁸²

While Hubbard is renowned for his personal achievement of introducing LSD to the upper echelons of American society, the entity that ultimately facilitated the exposure of the greatest number of Americans to LSD was the U.S. federal government. Beginning in the 1950s, the amount of LSD research occurring in the United States began to increase due to interest in the drug from the Central Intelligence Agency (CIA). The agency was intrigued by the prospects of LSD serving as a possible truth serum for interrogations, non-lethal chemical weapon to incapacitate enemy soldiers, and means of manipulating the behavior of its operatives as well as those of other countries. It secretly began bankrolling LSD research at major American universities, though few of the individuals conducting these studies were aware that the agency was funding their research.⁸³ The U.S. Army also did its part to help young Americans try LSD by dosing 4,826 of its soldiers with the drug between 1955 and 1975. The U.S. government eventually came to the conclusion that the drug’s effects were too unpredictable for it to be used in practical applications, and ceased the bulk of its experimentation by 1970.⁸⁴

⁸⁰ Ibid.

⁸¹ Douglas Valentine, *The Strength of the Wolf: The Secret History of America's War on Drugs* (New York, NY: Verso, 2006), 304.

⁸² Stevens, *Storming Heaven: LSD and the American Dream*, 55.

⁸³ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 6.

⁸⁴ Ibid., 7.

The activities of the CIA and U.S. military bear significant responsibility for exposing the U.S. public to the drug. In addition to exposing thousands of members of the Armed Forces to psychedelic drugs, the government's initiatives helped share LSD and similar substances with the many college students and faculty who volunteered to participate in the CIA-sponsored studies. Here too, psychedelic folklorists point out the irony that the Cold War—fuelled by the threat of nuclear weapons—ultimately funded and organized the introduction of young Americans to Hofmann's "cure."

Marijuana, Jazz, and the Beat Generation

The 1950s also saw the emergence of the "Beat Generation" counterculture that promoted its own understanding of marijuana and other psychoactive drugs.

The core of the new Beat culture was a community of writers who began their careers in the 1940s. It was not until the Fifties, however, that their literary works and bohemian lifestyles captured the imaginations of the many American young people who had become tired of the doldrums of the Eisenhower era. Prominent Beat writers such as Jack Kerouac, Allen Ginsberg, and William Burroughs satirized middle-class conformism, rejected societal institutions, and explored the joys and perils of living on the margins of American society. Beat scenes had sprung up across the country by the mid-Fifties, with epicenters in New York's Greenwich neighborhood and the North Beach area of San Francisco. Members of the Beat subculture would often sport unconventional monochrome fashion, have odd mannerisms, and lace their conversations

with “hip” vocabulary, much of which was borrowed from the black jazz artists they admired. The Beats also embraced alternative sexual orientations and activities, with several prominent Beat authors, such as Neal Cassady and Ginsberg, being openly bisexual.⁸⁵

The mainstream media was seldom kind to the Beats and enjoyed poking fun at their eccentricities. For example, writing in *Life* magazine, Paul O’Neil summarized the Beats as “talkers, loafers, passive little con men, lonely eccentrics, mom-haters, cop-haters, exhibitionists with abused smiles and second mortgages on a bongo drum.”⁸⁶ In other instances, the press would depict the Beats as deviants whose hatred of the establishment, alternative sexual orientations, admiration of black culture, and drug use was a legitimate threat to American society. To this end, many in the press began referring to members of the subculture using Herb Caen’s term “Beatnik,” which implied that members of the Beat movement were the domestic equivalent to the foreign threat being posed to the country by the Sputnik satellite.⁸⁷

The origins of the term “Beat” have been debated, but it is generally accepted to have originated in conversations between Kerouac, Ginsberg, Burroughs and their fellow writers in New York during the late Forties. In an article he wrote for *Esquire* magazine, Kerouac described the term as a descriptor of world-weariness, or in his words being “down and out but full of intense conviction.”⁸⁸ He went on to state that many individuals

⁸⁵ Kurt Hemmer, *Encyclopedia of Beat Literature*, Facts on File Library of American Literature. (New York, NY: Facts On File, 2007), 109.

⁸⁶ Paul O’Neil, “The Only Rebellion Around,” *Life Magazine*, November 30 1959, 114.

⁸⁷ Fox and Kloppenberg, *A Companion to American Thought*, 63.

⁸⁸ Jack Kerouac, “Philosophy of the Beat Generation,” *Esquire*, March 1958, 24.

within the urban underclass were “beaten down” by their circumstances but were capable of realizing a kind of mystical “beatitude.”⁸⁹ He extolled the virtues of self-liberation that he had witnessed within the hobos, black jazz musicians, religious mystics, and petty criminals in New York, and claimed the Beats to be:

Solitary Bartlebies staring out the dead wall window of our civilization...subterranean heroes who'd finally turned from the “freedom” machine of the West and were taking drugs, digging bop, having flashes of insight, experiencing the “derangement of the senses” [...] free from European influences.⁹⁰

The Beats regarded themselves as heirs to an American literary tradition passed down from Herman Melville and Walt Whitman.⁹¹ Michael Davidson notes, however, that Kerouac’s apparent reference to Arthur Rimbaud’s “derangement of the senses” evidences that the Beats were not entirely free from European influence.⁹² Indeed, the prophetic mode of romantics like William Blake can be felt in the works of Ginsberg and Michael McClure; Dada experimentation can be appreciated in the cut-up novels of Burroughs; French and Spanish surrealism appear in works by Philip Lamantia and Bob Kaufman. But it is Rimbaud and the Decadent movement to whom the Beats were most indebted. In a letter from 1871, Rimbaud details a personal mandate that very much resembles the Beat mission to seek out the “*beatitudes*” of those who are down-trodden or marginalized:

I'm now making myself as scummy as I can. Why? I want to be a poet, and I'm working at turning myself into a seer. You won't understand any of this, and I'm almost incapable of explaining it to you. The idea is to

⁸⁹ Ibid.

⁹⁰ Ibid., 24.

⁹¹ Fox and Kloppenberg, *A Companion to American Thought*, 62.

⁹² Ibid.

reach the unknown by the derangement of all the senses. It involves enormous suffering, but one must be strong and be a born poet. It's really not my fault.⁹³

In this respect, the Beats followed Rimbaud and a long line of poets—including De Quincey and Ludlow—in seeking enlightenment through suffering. Like these men, the Beats also sought enlightenment through the use of psychoactive drugs, though the Beats' relationship with drugs seems to have been principally influenced by the culture surrounding jazz music.

The Beats were avid fans of the new post-war style of jazz known as bebop, which was played in small combos and emphasized virtuosity and spontaneous creativity. Kerouac, Ginsberg, and their friends spent much of their time at New York clubs such as the Bop City, Three Deuces, and The Clique near 52nd Street. Prominent bebop artists, such as Charlie Parker, Dizzy Gillespie, and Miles Davis, were idolized by the movement as exemplars of the “beatitudes” they sought.⁹⁴ Describing this love affair in his book “Venice West,” John Arthur Maynard wrote:

Jazz served as the ultimate point of reference, even though, or perhaps even because, few among them played it. From it they adopted the mythos of the brooding, tortured, solitary artist, performing with others but always alone. They talked the talk of jazz, built communal rites around using the jazzman's drugs and worshipped the dead jazz musicians most fervently. The musician whose music was fatal represented pure spontaneity.⁹⁵

As Maynard mentions, few of the prominent Beats were musicians, yet they went to great lengths to incorporate aesthetic aspects of bebop into their literary works. Beat authors

⁹³ Graham Robb, *Rimbaud*, 1st American ed. (New York, NY: W.W. Norton, 2000), 79.

⁹⁴ William Lawlor, *Beat Culture: Lifestyles, Icons, and Impact* (Santa Barbara, CA: ABC-CLIO, 2005), 256.

⁹⁵ John Arthur Maynard, *Venice West: The Beat Generation in Southern California* (New Brunswick, NJ: Rutgers University Press, 1991), 48.

strove to write in a spontaneous manner that was emblematic of the immediate creativity required of jazz artists during improvisation. Ginsberg would often summarize this stream of consciousness approach to writing with the maxim “first thought, best thought.”⁹⁶ In this way, a lot of Beat prose is characterized by words blurted out in vigorous bursts, sparse punctuation, and a lack of revision. Describing this technique in his essay “Essentials of Spontaneous Prose,” Kerouac wrote:

No periods separating sentence structures already arbitrarily riddled by false colons and timid usually needless commas but the vigorous space dash separating rhetorical breathing (as jazz musician drawing breath between outblown phrases).⁹⁷

Moreover, authors such as Ginsberg would incessantly repeat words across their verses, emulating the jazz practice of beginning improvised lines with a uniform melodic riff to add cohesion and structure to their solos.⁹⁸ In the “Spontaneous Prose” essay, which is itself a piece of spontaneous prose, Kerouac wrote about the preferred “mental state” of an author attempting to write in this idiom:

If possible write “without consciousness” in semi-trance (as Yeats’ later “trance writing”) allowing subconscious to admit in own uninhibited interesting necessary and so “modern” language what conscious art would censor, and write excitedly, swiftly, with writing-or-typing-cramps, in accordance (as from center to periphery) with laws of orgasm, Reich’s “beclouding of consciousness.”⁹⁹

Here too, the Beats looked to the creative practices of improvising jazz artists and wrote under the influence of “the jazzman’s drugs” to achieve their desired states of semi-

⁹⁶ Sharin N. Elkholy, *The Philosophy of the Beats* (Lexington, KY: University Press of Kentucky, 2012), 183.

⁹⁷ Jack Kerouac, “Essentials of Spontaneous Prose,” *Evergreen Review* 1958, 72.

⁹⁸ The repeated use of the word “Who” and “Moloch” at the beginning of stanzas in Ginsberg’s *Howl* (1956) is an example of this practice.

⁹⁹ Kerouac, “Essentials of Spontaneous Prose,” 72.

trance. Since Anslinger's time, jazz musicians were known for mixing drugs and music.

Indeed, in his "Assassin of Youth" editorial from 1937 Anslinger wrote:

Among those who first introduced it [to New York] were musicians, who had brought the habit northward with the surge of "hot" music demanding players of exceptional ability, especially in improvisation [...] the musician who desired to get the "hottest" effects from his playing often turned to marijuana for aid.¹⁰⁰

Indeed, many of the early jazz greats, including Louis Armstrong, have discussed the role that marijuana played in enhancing improvisation.¹⁰¹ Following in their footsteps, many Beats consumed marijuana, Benzedrine (a mix of amphetamine stimulants commonly called "bennies"), and many opium-based drugs such as heroin. Many famous Beat works were written over short periods of time under the influence of drugs. Jack Kerouac, in particular, is famous for his long sessions of writing under the influence of bennies in the early Fifties.¹⁰² This practice is very pertinent to the subject of this dissertation, as it is arguably the first time that drugs were both explicitly and intimately used to enhance creativity by white Americans. Whereas earlier authors' experimented with opium and marijuana to derive *inspiration* from drugs, the Beats desired to compose their works *within* the altered state to capitalize on the sensibilities it afforded—a concept that would be central to the psychedelic art and music of the Sixties.

In addition to introducing white America to the synergic relationship of drugs and creativity that had long been embraced in the jazz world, prominent Beat authors

¹⁰⁰ Anslinger and Cooper, "Marijuana: Assassin of Youth."

¹⁰¹ Samuel Barclay Charters, *A Trumpet around the Corner: The Story of New Orleans Jazz* (Jackson, MS: University Press of Mississippi, 2008), 287.

¹⁰² Hilary Holladay and Robert Holton, *What's Your Road, Man?: Critical Essays on Jack Kerouac's on the Road* (Carbondale, IL: Southern Illinois University Press, 2009), 14.

captured the imaginations of less-worldly middle-class Americans through the drug references in their literature. Ginsberg's epic poem *Howl* (1956) makes specific reference to marijuana and Benzedrine while recounting the bizarre adventures and misfortunes of artists, drug addicts, psychiatric patients, and other eccentric individuals. The poem circulated in San Francisco's local poetry scene before receiving national attention following a review by Richard Eberhart of the *New York Times*. The work received additional attention after its explicit mention of gay sex resulted in obscenity charges being pressed in California against those responsible for the publication and distribution of the work.¹⁰³ While *Howl* was among the first Beat works to both mention drugs and receive national attention, the structure and content of the poem was too abstruse for mainstream audiences, and it did not depict psychoactive substances in a manner that many would find appealing. To this end, it was Kerouac's novel *On The Road* (1957) that ultimately provided mainstream America with an accessible and enticing glimpse into the Beat drug culture. The book was a largely autobiographical tale of Kerouac's pursuit of adventure traveling across the country in the late 1940s. The book is full of Americana, including many references to jazz music and the mythology of the open highway. It tells the story of two men, Sal Paradise and Dean Moriarty, who meet in San Francisco and develop a friendship. Sal, who represents Kerouac in the novel, is a contemplative author who is yearning for freedom after a recent divorce. Dean, who represents Neal Cassidy, is a free spirit who shirks responsibility and is always finding exciting highs by exploring

¹⁰³ The charges were eventually dropped by a judge in the state's Superior Court.

new kicks.¹⁰⁴ The plot centers on Sal, who narrates the books, and his struggle to reconcile his desire for a conventional life with his lust for Dean's lifestyle of freedom, nomadism, and adventure. The two men have many adventures together, which are saturated with travel, sex, drugs, and jazz music. The book makes specific reference to Benzedrine, barbiturates, and morphine but is especially notable for its vivid descriptions of the effect of marijuana. In a passage describing the effects of some especially potent marijuana, Dean states:

I lay rigid as a board in bed and couldn't move or say a word; I just looked straight up with my eyes open wide. I could hear buzzing in my head and saw all kinds of wonderful technicolor visions and felt wonderful. The second day everything came to me, EVERYTHING I'd ever done or known or read or heard of or conjectured came to me and rearranged itself in my mind in a brand-new logical way and because I could think of nothing else in the interior concerns of holding and catering to the amazement and gratitude I felt.¹⁰⁵

The plot of *On the Road* climaxes with a road trip to Mexico wherein Dean and Sal have their greatest—and last—adventure together. Kerouac depicts Mexico as “one vast bohemian camp” full of hipsters feasting on cheap food, sex, drugs, and alcohol. Describing his experience of traveling through Mexico while high on marijuana, Sal narrates:

I was so high I had to lean my head back on the seat; the bouncing of the car sent shivers of ecstasy through me. The mere thought of looking out the window at Mexico—which was now something else in my mind—was like recoiling from some gloriously riddled glittering treasure-box that you're afraid to look at because of your eyes, they bend inward, the riches and the treasures are too much to take all at once. I gulped. I saw streams

¹⁰⁴ David Sandison and Graham Vickers, *Neal Cassady: The Fast Life of a Beat Hero*, 1st ed. (Chicago, IL: Chicago Review Press, 2006), 177.

¹⁰⁵ Jack Kerouac, *On the Road* (New York, NY: Penguin Books, 1991), 107.

of gold pouring through the sky and right across the tattered roof of the poor old car, right across my eyeballs and indeed right inside them; it was everywhere.¹⁰⁶

During their adventure in Mexico, the two men indulge themselves in mambo music and underage prostitutes, as well as its cheap and abundant marijuana and alcohol. Sal ends up sick with dysentery and Dean abandons him—an act that demonstrates the deficits of Dean and his lifestyle to Sal.

Kerouac's poetic descriptions of his character's sensual and philosophical experiences on marijuana were romantic and appealing presentations of the drug to the American audience. Moreover, Kerouac further enticed his readers by positioning these experiences within the context of a hedonistic lifestyle that appealed to the basal desires of the mainstream. He incorporated drug use into an imagined lifestyle of freedom, self-expression, and adventure on the new interstate system, which would be fulfilled by many Americans in the coming decade.

The Publication of “Seeking the Magic Mushroom” in *Life* Magazine

A few months before Kerouac's *On the Road* was published, the American public had been alerted to the existence of a potent psychedelic drug that was readily available in a handful of wild mushroom species in the United States: psilocybin. In April of 1957, Robert Gordon Wasson, a vice-president at J.P. Morgan & Co, and his wife Valentina, a

¹⁰⁶ Ibid., 165.

New York pediatrician, published a prominent article in *Life* magazine entitled “Seeking the Magic Mushroom.”¹⁰⁷ The couple had traveled the world exploring the cultural significance of mushrooms and are credited today with being pioneers in the field of ethnomycology. The *Life* article recounts a recent summer the Wassons had spent in Mexico studying Mazatec rituals involving psilocybin mushrooms. It contained detailed descriptions of psilocybin’s effects, as well as pictures of the Mazatecs, Wasson, and his photographer consuming and experiencing the drug. Describing his visions Wasson wrote:

They were in vivid color, always harmonious. They began with art motifs, angular such as might decorate carpets or textiles or wallpaper or the drawing board of an architect. Then they evolved into palaces with courts, arcades, gardens—resplendent palaces all laid over with semiprecious stones. Then I saw a mythological beast drawing a regal chariot. Later it was as though the walls of our house had dissolved, and my spirit had flown forth, and I was suspended in mid-air viewing landscapes of mountains, with camel caravans advancing slowly across the slopes, the mountains rising tier above tier to the very heavens [...] I saw river estuaries, pellucid water flowing through an endless expanse of reeds down to a measureless sea, all by the pastel light of a horizontal sun. This time a human figure appeared, a woman in primitive costume, standing and staring across the water, enigmatic, beautiful, like a sculpture except that she breathed and was wearing woven colored garments. It seemed as though I was viewing a world of which I was not a part and with which I could not hope to establish contact.¹⁰⁸

The Wassons identified seven species of mushrooms that contain psilocybin and supplied photographs of each. They also made recordings of the traditional songs sung by the Mazatecs during mushroom ceremonies, which were released on LP by Folkways Record

¹⁰⁷ Robert Gordon Wasson, “Seeking the Magic Mushroom,” *Life*, May 1957.

¹⁰⁸ *Ibid.*, 113.

that same year.¹⁰⁹ While brief, the Wassons' contribution to American psychedelic culture is notable for several reasons. First, as an executive for one of the largest financial firms in the United States, Richard Wasson was a well-regarded member of the mainstream elite, and capable of piquing the interest of the many Americans who held little respect for Ginsberg, Kerouac, and their fetish for derelict lifestyles. Second, the article's publication in *Life* magazine would have placed it on coffee tables in many households in middle-America that would have been largely unaware of psychedelic drugs and their effects. Lastly, the Wassons' article made Americans aware of a powerful psychedelic substance available in nature, which—unlike LSD—did not require a laboratory and chemistry skills to create.

KEN KESEY, TIMOTHY LEARY, AND THE DEVELOPMENT OF THE AMERICAN PSYCHEDELIC SUBCULTURE

Huxley and Osmond introduced the psychedelic paradigm and established the philosophical foundation for intellectual drug culture. In the late Fifties, the Beat Generation introduced mainstream America to additional concepts and attitudes concerning drugs that were borrowed from Rimbaud and the Decadents, as well as black jazz culture. In the Sixties, these various contributions were consolidated by two charismatic leaders who emerged in the early years of the decade itself: Ken Kesey and

¹⁰⁹ R.G. & V.P. Wasson, *Mushroom Ceremony of the Mazatec Indians of Mexico* (New York, NY: Folkways Records FR 8975, 1957).

Timothy Leary.

Ken Kesey

The psychedelic subculture that emerged on the West Coast during the 1960s was largely pioneered by a creative writing student at Stanford University named Ken Kesey. Kesey was born in 1935 and raised on a dairy farm in La Junta, Colorado before his family relocated to Springfield, Oregon. He is considered by many, including himself, to be a cultural link between the Beat Generation and the counterculture movements that followed in the Sixties. Indeed, in an interview with Robert Elder, Kesey remarked, “I was too young to be a beatnik, and too old to be a hippie.”¹¹⁰ In 1957, he graduated from the University of Oregon’s School of Journalism with a degree in speech and communication. After spending a brief period of time in Los Angeles, Kesey enrolled in a non-degree creative writing program at Stanford University in the fall of 1958.¹¹¹ He studied with authors Wallace Stegner, Malcolm Cowley, and Frank O’Connor, and met several fellow students who would become lifelong friends and go on to become successful writers. Kesey and his wife Faye lived in a one-block area of Menlo Park near Stanford called Perry Lane where the neighborhood’s residents modeled their lifestyle after the Beat scene in the North Beach neighborhood in San Francisco.¹¹² Having been raised on a farm, Kesey was somewhat of a country bumpkin in the eyes of the Perry

¹¹⁰ Rob Elder, “Down on the Peacock Farm,” Salon.com, <http://www.salon.com/2001/11/16/kesey99/>. Accessed January 21, 2015.

¹¹¹ Lawlor, *Beat Culture: Lifestyles, Icons, and Impact*, 186.

¹¹² Ibid.

Lane hipsters. Though polite, his etiquette lacked refinement, and he spoke in simple language with a soft country accent. Nevertheless, the community at Perry Lane appreciated his sharp wit and embraced him as a quaint embodiment of forgotten agrarian virtues.¹¹³

His Introduction to Psychedelic Drugs

At Perry Lane, Kesey became acquainted with a graduate student in psychology named Vik Lovell. Lovell instilled within Kesey a fascination with human behavior and introduced him to many concepts from Freudian psychology. In 1961, Lovell encouraged Kesey to join him in a government-funded study at the Menlo Park Veterans Hospital, which paid participants \$75 a day to undergo tests involving “psychomimetic” (psychosis mimicking) drugs.¹¹⁴ Kesey enrolled and was deeply moved by his experiences. In a very short period of time, the study introduced Kesey to a diverse array of psychoactive drugs, which purportedly included LSD, psilocybin, mescaline, IT-290, and Ditrane.¹¹⁵ In addition to being struck by the effects of these drugs, Kesey was also fascinated by the psychiatrists administering the tests to him. He felt that they had a very shallow understanding of the substances they were studying and suspected that they had probably

¹¹³ Tom Wolfe, *The Electric Kool-Aid Acid Test*, Bantam trade pbk. ed. (New York, NY: Bantam Books, 1999), 37.

¹¹⁴ Ibid., 40.

¹¹⁵ Ibid., 44.

never experienced them personally as they seemed very oblivious to the underlying nature of their effects.¹¹⁶

Kesey managed to obtain a position as an aide in the psychiatric ward of the Veterans hospital where he had participated in the drug studies. This job further convinced him that most psychiatrists were unable to understand their patients. Moreover, it allegedly allowed Kesey access to many of the psychoactive drugs he had consumed in the study. He shared these drugs with his friends back in Perry Lane, who around this time had also begun to order large shipments of peyote from Texas.¹¹⁷ Kesey would sometimes go to work at the hospital on LSD and interact with psychiatric patients with hopes of better understanding their psychosis.¹¹⁸

The result of Kesey's experiences as both a test subject and a psychiatric aide at the Veterans hospital was his well-known book *One Flew Over the Cuckoo's Nest* (1962).¹¹⁹ This book quickly received popular and critical acclaim. The book is narrated from the hallucinatory perspective of a Native American psychiatric patient, "Chief" Bromden, who is observing interactions between himself, fellow patients, and the authoritarian staff at his hospital. His narrative explores the different systems through which the patients are manipulated and controlled by subversive means. Bromden amalgamates and personifies these systems into an entity he calls "The Combine," and considers the head nurse, Ms. Ratched, to be both its operative and victim. The plot is considered to be an allegorical commentary on the relationship between the individual

¹¹⁶ Ibid., 41.

¹¹⁷ Ibid., 45-6.

¹¹⁸ Ibid., 48.

¹¹⁹ Lawlor, *Beat Culture: Lifestyles, Icons, and Impact*, 186.

and societal control mechanisms. Kesey is said to have written sections of the book while on LSD and peyote.¹²⁰ Indeed, within it one may glean many of the perspectives that would come to define Kesey's psychedelic philosophy, such as *intersubjectivity*.

Birth of the Merry Pranksters

In the spring of 1963 a developer purchased Perry Lane, and the neighborhood's small cottages were slated for destruction to make way for a new housing development. Kesey relocated to La Honda, California, a small town in the rolling terrain that lies east of San Jose. He used his book proceeds to purchase a large piece of property that became the home base and staging area for his activities. At first, gatherings at Kesey's property in La Honda were simple parties where friends met to relive the lifestyle they had once enjoyed on Perry Lane, which included plenty of psychedelic drugs. Kesey quickly grew tired of the kind of simple experimentation with drugs that had been commonplace on his former street, and desired to have more intense and enlightening experiences.¹²¹ His parties evolved into more organized events in which Kesey would lead his guests on premeditated psychedelic adventures around the compound. La Honda soon acquired a reputation of being, to quote Tom Wolfe, a "psychedelic Versailles" with Kesey firmly situated as its Sun King.¹²²

¹²⁰ Wolfe, *The Electric Kool-Aid Acid Test*, 49.

¹²¹ Ibid., 62.

¹²² Ibid.

By 1964, a contingent of Kesey's friends, which by this time included Beat author Neal Cassady and many people from outside the Perry Lane community, began to camp out on his property for extended lengths of time. In the spring of 1964, Kesey and this group of core followers decided to set out on a cross-country road trip from California to visit New York City and see the World's Fair. Kesey purchased a 1939 Harvester International bus from a man in Menlo Park who had fitted it with a sink, bunk beds, and several other amenities. The group further customized the bus by installing a roof deck, painting the exterior with the bright and colorful patterns, and naming it "Furthur."

Today, Furthur's paint job is considered to be one of the earliest prototypes of the surreal and colorful aesthetic that came to define psychedelic visual art.¹²³ Early—if not original—examples of the psychedelic aesthetic's fondness for color and randomness were also present in wooded areas on Kesey's property, which had been turned into a psychedelic playground for drug trips. The trees had strange mobiles suspended from low-hanging branches and wild paintings nailed to their trunks.¹²⁴ There were also random objects—telephones, mattresses, TVs—painted with bright DayGlo fluorescent colors strewn about the woods. The group also enjoyed dressing themselves in odd costumes that featured bright colors, and were among the first in the Sixties to create and wear tie-dye clothing.

¹²³ Ibid., 68. The bus was painted by the group using everything from brushes to the Prankster's feet. The more detailed portions of the bus's paint job were done by Prankster Roy Seburn.

¹²⁴ Ibid., 58.

Experiments with Sound and Music

Kesey and his friends were also innovative in their construction of elaborate sound systems. They enjoyed fitting environments with multiple microphones and speakers, which could capture and project sound in a variety of configurations. The trees in the wooded area around Kesey's house were wired with microphones that could capture the sounds of nature, or whoever happened to be making noise in the vicinity. There were also large speaker horns across the road from Kesey's house that could play feeds from the microphones in the woods, people's voices, or one of Kesey's jazz records.¹²⁵ The Prankster's bus "Furthur" was wired in a similar manner. It had microphones and speakers both inside and outside of the bus, allowing the Pranksters to capture and amplify in many different configurations.¹²⁶ At the center of these and other sound setups was an Ampex tape recorder that the group kept with them whenever possible. It permitted the Pranksters to experience taped recordings of past events or soundscapes. They also configured the Ampex to function as a variable-lag tape delay device on their live sound feeds.¹²⁷ In this way, while the scattered placement of microphones and speakers enabled the distortion of *space*, the Ampex enabled the distortion of *time*.

While no one in the group is reported to have been a skilled musician, they greatly enjoyed making music together. They enjoyed improvising with musical instruments,

¹²⁵ Ibid., 138.

¹²⁶ Ibid., 68.

¹²⁷ Ibid., 68, 246.

including electric guitar, bass, organ, flute, and drum kits.¹²⁸ The music they produced seems to have seldom consisted of conventional song, but were rather loosely improvised jam sessions that owed much to free jazz and other forms of contemporary avant-garde music. In Tom Wolfe's account of the group, the sound of these sessions is described with the adjectives "strange," "atonal," and "Chinese."¹²⁹ Audio from surviving footage of the group contains a few samples of their music. In these examples, they are often dancing with kazoos, recorders, flutes, and other hand-held instruments, and playing short, unrelated melodic ideas that collectively comprise a freeform atonal collage of sound.¹³⁰ Kesey and his friends would also engage in an activity they called "rapping," which involved taking turns improvising nonsensical sentences in quick succession that were loosely connected to one another—a game that seems to owe some of its inspiration to the "spontaneous prose" of the Beats. Occasionally, the group incorporated their rapping game into their musical activities and would even feed this pastiche of sound through their audio system's spatial and variable-lag effects.¹³¹ Samples of Prankster music can also be heard on an LP the group released in 1966 entitled *The Acid Test*.¹³² This LP primarily contains spoken word between Kesey and an interviewer, but the Prankster's unique musical creations can be heard playing in the background and during intermissions.

¹²⁸ Ibid., 409.

¹²⁹ Ibid., 235.

¹³⁰ Alex Gibney and Alison Ellwood, "Magic Trip," (United States: Magnolia Pictures, 2011).

¹³¹ Wolfe, *The Electric Kool-Aid Acid Test*, 409.

¹³² Ken Kesey, *The Acid Test* (San Francisco, CA: Sound City 5, 1966).

“Furthur” Bus Trip to New York and the Consolidation of the Prankster Philosophy

The group eventually set out as planned on their long trip to New York. Ironically, Neal Cassady—the inspiration for Dean Moriarty in *On the Road* as well as the eldest and most-travelled member of the group—insisted on coming along as a “guardian.” Indeed, Cassady was a great asset, driving for countless hours while high on amphetamines and fixing the engine on several occasions.¹³³ Kesey was constantly filming with his movie camera throughout the trip. He had become obsessed with film, and was interested in exploring the medium as a successor to literature, once stating, “If Shakespeare were writing today, I don’t think he would use a quill pen.”¹³⁴ He was determined from the outset to capture the journey and make a movie from the footage. Kesey brought plenty of psychedelic drugs with them on this trip, including a large amount of LSD mixed with some orange juice, and the powerful psychedelic drug IT-290. Early in the trip the group began calling themselves “The Merry Pranksters,” a name that would ultimately stick with Kesey and his followers.¹³⁵

Notably, many of the “ingredients” that went into the bus trip were present back in La Honda: communal living, psychedelic drugs, innovative art and music, sexual freedom, a sense of isolation from the outside world, among other things. While members of the group were not strangers to these things, the intense concentration of these experiences while travelling across the country on a crowded bus with an abundant

¹³³ Gibney and Ellwood, “Magic Trip.”

¹³⁴ Ibid.

¹³⁵ Ibid.

supply of LSD reportedly gave the Pranksters a vision for a new American society.¹³⁶

Notably, unlike many in the Sixties, the Pranksters approached existing American society from a perspective that was critical, but not antagonistic. There was much that troubled them about it, but they belonged to the segment of Sixties counterculture that was suspicious of ideology in general—be it left-wing, right-wing, or even their own.

Moreover, the Pranksters were patriotic in their own way. Commenting on this, Kesey stated:

The notion of us being wild crazies wasn't true. We weren't longhaired and we weren't irresponsible. There was an American sense. That's why we always wore red white and blue, and flew the flag—it was to try to cool the people out and say “hey, this might look strange to you, but get used to it, it's American, and without it we're a dead nation.”¹³⁷

Moreover, they viewed their experimentation with psychedelic drugs to be a form of exploration similar to that done by European settlers on the North American continent.

Kesey later reflected:

I thought this was as American as you could get because we were exploring a new territory, just the same way we went to the moon or sent the Lewis and Clark Expedition here to Oregon. It's part of our American personality, you find a cave, nobody's been in it, you try to go down deeper in the ocean and higher in the sky [...] These drugs were opening the door to a new landscape. Once you're through that door, and you look out onto this vast room on all these windows onto new vistas...you become tremendously excited and want to do what you can to explore it cause you looked around and saw there weren't human footprints all over this landscape.¹³⁸

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid.

In this way, the Pranksters perceived themselves to be less a movement that existed to *oppose* established norms, but prototypical pioneers of the next American frontier.

At the heart of the Prankster philosophy was the belief that every person lives in their own unique fantasy and is living life to the fullest when they acknowledge their fantasy and embrace it. In the eyes of the Pranksters, most people lose sight of their fantasy and become trapped in a boring game of which they are not aware.¹³⁹ Kesey sought to draw Americans' attention to the human propensity to focus on perception related to function and recognition, which he once explained with the simple complaint, "when we look, we're not looking *at*, we're looking *for*."¹⁴⁰ He believed this tendency to "look for" was an important part of the mechanism that trapped people in these games. The Pranksters considered the police to be the epitome of this notion, as they perceived them to be almost completely absorbed in institutionalized behaviors or "games," and "looking for" perspectives.¹⁴¹ Kesey and his fellow Pranksters were also keen on the theory of intersubjectivity, a construct used in psychology and sociology to explain the process of two minds sharing a given set of meanings.¹⁴² They believed a better understanding of intersubjectivity was the key to building more meaningful social relations between the fantasies people lived.

The inspirational role that psychedelic drugs played in the formation of the Prankster philosophy is easy to appreciate. Kesey's remark concerning the human

¹³⁹ Wolfe, *The Electric Kool-Aid Acid Test*, 19.

¹⁴⁰ Gibney and Ellwood, "Magic Trip."

¹⁴¹ Wolfe, *The Electric Kool-Aid Acid Test*, 151.

¹⁴² For discussion of this concept see Jordan Zlatev, *The Shared Mind: Perspectives on Intersubjectivity*, (Philadelphia, PA: John Benjamins Pub. Co., 2008).

propensity to “look *for* rather than *at*” speaks to the Huxley/Osmond theory that psychedelic drugs disrupt the brain’s natural process of prioritizing sensory input that is most relevant to our survival. Moreover, the capacity of psychedelic drugs to shift perception and dissolve shared meaning between individuals during trips illustrates the importance of intersubjectivity.¹⁴³ Kesey’s emphasis on these particular features of psychedelic drugs seems to have been informed by his experiences as a psychiatric aide. Indeed, intersubjectivity in particular is a central theme in *Cuckoo’s Nest*. In many respects, it can be argued that the psychedelic philosophy of Kesey and the Pranksters was founded on the belief that everyday life for a “sober,” “sane” American was not all that different from that of a psychiatric patient or someone on LSD. The “sane” American was just living a more common fantasy.

Shuffling from one LSD trip to the next, the Pranksters drove their bus Further across the southern belly of the United States, through Arizona, Texas, the Deep South, Florida, and up the Eastern seaboard.¹⁴⁴ Few Americans knew what to make of the brightly painted bus that blared odd sounds from its external speakers as it pulled into gas stations, main streets, and suburban driveways across the country—let alone the oddly dressed, LSD-tripping travelers inside. A few years later, tour buses would be driving through the Haight-Ashbury district of San Francisco giving paying tourists a glimpse at the exotic drug-crazed hippie—but this was 1964! Americans were still coming to terms

¹⁴³ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 129-36.

¹⁴⁴ Wolfe, *The Electric Kool-Aid Acid Test*, 80.

with four polite, neatly-dressed young British musicians who called themselves the Beatles. This was ultimately to the Prankster's advantage, as no stigma other than a lack of familiarity preceded their reception. "Furthur" was pulled over several times by local police who had concerns about its odd appearance and roadworthiness, but Kesey and Cassady always succeeded in assuaging their concerns.¹⁴⁵

The bus eventually arrived in New York City and the Pranksters got to visit the World's Fair, though many felt its vision of the future was less inspiring than the one they had realized on their journey from California.¹⁴⁶ The group befriended Allen Ginsberg while in New York. They also met Jack Kerouac, who seemed annoyed by the youthful antics of the Pranksters. Ginsberg made special arrangements for the Pranksters to visit Millbrook, New York, where Timothy Leary and Richard Alpert were running an organization dedicated to enlightenment through psychedelic drugs out of an old Gothic mansion. The Pranksters were quite enthused about connecting with their psychedelic counterparts on the East Coast. At Millbrook, they received a friendly greeting from Alpert, though Timothy Leary absconded to the upper floors of the mansion and avoided them.¹⁴⁷ As I will discuss later, it quickly became apparent that the West Coast Pranksters and the East Coast Learyites approached psychedelic drugs with disparate attitudes and understandings.

The trip back to California reportedly had a different feel than the journey to New York. Neal Cassady and several Pranksters found their own way back home. The bus

¹⁴⁵ Ibid.

¹⁴⁶ Gibney and Ellwood, "Magic Trip."

¹⁴⁷ Ibid., 106.

traveled across the northern United States and made a short journey into Manitoba. On the trip to New York, the Pranksters had enjoyed a very open sexual arrangement within their group. On the trip back, several of the male Prankster's wives—including Kesey's wife Faye—joined the bus and participated in this dynamic. Spouses began intermingling freely, which caused the ride home to be both sexually intense and complicated towards the end.¹⁴⁸ Like the journey to New York, this too foreshadowed cultural changes to come later in the Sixties.

Troubles with Law Enforcement

After returning home to La Honda, the special psychedelic culture that had evolved on the trip out East persevered. Moreover, new people wanted to participate in it.¹⁴⁹ Psychedelic parties in Kesey's decorated forest continued, but were larger, and informed by the experiences of the bus trip. Kesey also began to receive attention from law enforcement towards the end of 1964, which eventually led to him being charged in two separate incidents for the possession of marijuana. This attention from law enforcement was soon followed by media coverage, which only furthered Kesey's notoriety as a leader of the new psychedelic movement.¹⁵⁰

Through all this, Kesey continued to capture new film of the Pranksters and edit existing footage. This project became the official focus of the Prankster's activities. Prior

¹⁴⁸ Ibid.

¹⁴⁹ Ibid.

¹⁵⁰ Wolfe, *The Electric Kool-Aid Acid Test*.

to the bus trip, Kesey had formed a corporate entity for the Prankster's operations called "Intrepid Trips, Inc." Through this corporation, Kesey provided food and lodging for the Pranksters, funded their bus trips, and kept a few vehicles and petty cash on hand for them to use. Most of the corporation's expenses were related to the production of the movie, including approximately \$70,000 for color processing alone. Kesey spent nearly all of his publishing royalties in the mid-Sixties on the Pranksters and this movie. By the end of 1965, Intrepid Inc. had cost him \$103,000 (\$740,000 in 2012 dollars).¹⁵¹ Unfortunately, most of his footage remained unseen by the general public until its inclusion in the documentary *Magic Trip* in 2011.¹⁵²

By the summer of 1965, life had become stressful for Kesey. Scrutiny from law enforcement and his approaching trials weighed heavily on him. Moreover, the scene at La Honda had grown increasingly chaotic as more people began to camp out on his property. The Pranksters had also formed an odd friendship with the Hells Angels, who admired the group's free spirit and shared their fondness for drugs.

The "Acid Test" Events

Despite these troubles, "Furthur" continued to make road trips around the West Coast. Moreover, Kesey became increasingly focused on sharing the experience of LSD with the general public. The Pranksters began to organize large events that they called

¹⁵¹ Ibid., 137.

¹⁵² Gibney and Ellwood, "Magic Trip."

“Acid Tests,” in which newcomers to LSD would take the drug in a multimedia environment. The first official Acid Test took place in Santa Cruz on November 27, 1965. That night, the group set up lighting effects, projected movies, and a sound system at Prankster Ken Babbs’s house.¹⁵³ The Pranksters also hired a new rock band from Palo Alto called the Warlocks to play the event, who would soon change their name to the Grateful Dead.¹⁵⁴ Though the event was enjoyable, most of the people who attended were either Pranksters or their friends. In an effort to attract more newcomers to LSD, the Pranksters arranged for the next Acid Test to take place on December 4, 1965, the night of a Rolling Stones concert at the Civic Auditorium in San Jose. As the auditorium emptied after the concert, the Pranksters passed out leaflets asking “Can you pass the Acid Test?” and inviting people to a large house where the Grateful Dead and a multimedia sound, movie, and light show were waiting.¹⁵⁵ The third Acid Test took place in a 100 ft. long cabin at Muir Beach north of San Francisco on December 11, and followed the same format as the previous two events. This test was a breakthrough for the Pranksters, as it was the first test in which most of the attendees were newcomers.¹⁵⁶ For the remainder of 1965 and all through 1966, the Pranksters continued to host Acid Tests in various locations throughout California and Oregon. Whenever possible, the Grateful Dead would be the featured musical act. The Pranksters liked the spontaneous and free nature of the Grateful Dead’s music, and the fact that the band did not play in defined

¹⁵³ Ibid., 234.

¹⁵⁴ Stevens, *Storming Heaven: LSD and the American Dream*, 248.

¹⁵⁵ Wolfe, *The Electric Kool-Aid Acid Test*, 239.

¹⁵⁶ Ibid., 234-40.

sets.¹⁵⁷ Moreover, they felt that the Dead were masters at catering to the vibe of their audience, playing “what was in the air, not on the music sheet.”¹⁵⁸ The Dead remained grateful to the Pranksters for their start. Moreover, the Pranksters were a prototype of the communal “Deadhead” culture that eventually formed around the band and followed them on tour for several decades. Reflecting on the Pranksters, long after the Sixties were over, Jerry Garcia remarked that the group was the Dead’s “first and best audience.”¹⁵⁹

Shortly after the Pranksters held an Acid Test at the famous Trips Festival in San Francisco in January of 1966, Ken Kesey slipped into Mexico to avoid possible jail time for his marijuana charges.¹⁶⁰ The Pranksters continued to hold Acid Tests but lacked direction and motivation in Kesey’s absence. Furthermore, as the group became increasingly adept at attracting LSD newcomers to the Acid Tests, there were more incidents of participants suffering bad trips and ending up in hospitals and police stations. The Acid Test that occurred in the Watts neighborhood of Los Angeles had a particularly bad outcome as the LSD was administered in a poorly designated bowl of “Electric” Kool-Aid, and many attendees unknowingly consumed large doses of the drug.¹⁶¹

On October 6, 1966, possession of LSD became illegal in the state of California, making it too risky for the Pranksters to continue their Acid Tests.¹⁶² Law enforcement also arrested Kesey that same month after he returned to California. He faced several

¹⁵⁷ Ibid., 240.

¹⁵⁸ Gibney and Ellwood, “Magic Trip.”

¹⁵⁹ Ibid.

¹⁶⁰ Wolfe, *The Electric Kool-Aid Acid Test*, 264.

¹⁶¹ Ibid., 283.

¹⁶² Stevens, *Storming Heaven: LSD and the American Dream*, 291. Possession of LSD was gradually outlawed by individual states over the course of the mid-1960s.

charges, including those related to his flight to Mexico, but his lawyers negotiated a plea bargain that kept him out of jail.¹⁶³ Upon returning to the Pranksters, Kesey announced that it was time for the psychedelic movement to “move beyond acid.”¹⁶⁴ Speaking to reporters outside his bus Furthur, Kesey remarked:

We went wild for a while. We went wild because we’d been caged up for 50,000 years. We went wild and found out there was more than we’d been led to believe. And now, unless we start finding a little piece of it, that we could call the reins, it’s going to get away from us. It doesn’t necessarily mean you stop taking acid, but you stop *repeating* the trips.¹⁶⁵

In a separate statement, Kesey asserted his belief that the educational value of psychedelic drugs was a diminishing return, and that many individuals were continuing to use them for the wrong reasons:

Every head knows that he takes a drug to eventually stop taking it. And I think that it is time for a great number of them to stop. I believe that drugs have now become a fashion.¹⁶⁶

Kesey’s new perspective on psychedelic drugs made him unpopular with many in the Haight-Ashbury neighborhood of San Francisco, who felt he was putting a damper on a movement that was still in its infancy. He was also accused by some of adopting this new doctrine as part of his plea bargain with law enforcement.¹⁶⁷ Nevertheless, on October 31, 1966, the Pranksters and Grateful Dead held an “Acid Test Graduation” at the Winterland Ballroom in San Francisco at which people were challenged to trip without LSD. Those who succeed received diplomas from the Pranksters to document their achievement.¹⁶⁸

¹⁶³ Wolfe, *The Electric Kool-Aid Acid Test*, 370.

¹⁶⁴ *Ibid.*, 376.

¹⁶⁵ Gibney and Ellwood, “Magic Trip.” Emphasis added.

¹⁶⁶ *Ibid.*

¹⁶⁷ Wolfe, *The Electric Kool-Aid Acid Test*, 376.

¹⁶⁸ *Ibid.*, 385.

Kesey eventually moved to a farm in Oregon where the Prankster lifestyle continued. In 1969, however, after a group of about 60 Pranksters who were residing at the farm departed for Woodstock, Kesey decided to call it quits and focus on his family and writing.¹⁶⁹

It is difficult to overstate the importance of Kesey and the Pranksters to psychedelic culture on the West Coast in the Sixties. They were arguably the first group to live a communal lifestyle in which the psychedelic drugs, art, and open sexual relationships were central to their identity as a collective.¹⁷⁰ Like Huxley, the Pranksters applied their experiences on psychedelic drugs to existential questions. The peculiarities they experienced on drugs enlightened them to the many peculiarities they experienced *off* drugs, and led them to challenge their most basic assumptions. The group played an important role in developing a visual psychedelic aesthetic that consisted of patterns and shapes set with a diverse array of bright colors. They were also among the first to use audio effects, such as tape delay and multi-directional sound, to enhance the experience of psychedelic drugs. The Pranksters are also notable for their commitment to exporting their lifestyle, philosophy, and aesthetic, through both their road trips with Furthur and the Acid Tests. They administered LSD to ordinary Americans in hopes of awakening them to the subjectivity of sentient experience. Moreover, in the process of doing so, they popularized the Grateful Dead, who became one the most enduring psychedelic bands of the Sixties with the help of fans who were arguably the legacy of the Pranksters’

¹⁶⁹ Gibney and Ellwood, “Magic Trip.”

¹⁷⁰ Wolfe, *The Electric Kool-Aid Acid Test*, 138.

brand of communal living. Even Kesey's initiative to go "beyond acid," which encouraged people to stop taking drugs, was groundbreaking in its own way. It encouraged people to learn from the unique perspective afforded by psychedelic drugs and then move on, advocating that a drug should be an experience and not a lifestyle.

Timothy Leary

On the East Coast, a separate vein of psychedelic culture grew out of Harvard University in the early Sixties, which was led by Timothy Leary and his associate Richard Alpert.

Leary was born in Springfield, Massachusetts to an Irish Catholic family. His father was a dentist in the army, who struggled with alcoholism and was abusive towards Leary.¹⁷¹ After a brief stint at The College of the Holy Cross in Worcester, Massachusetts, Leary studied for a period of time at West Point Academy in New York. Eventually, he earned a bachelor's degree in psychology at the University of Alabama. He went on to earn a master's degree in psychology from Washington State University at Pullman before attaining his doctorate in this subject at the University of California at Berkeley in 1950.¹⁷² Leary continued at Berkeley in the role of assistant professor while working at the Kaiser Hospital in Oakland, California. By most accounts, Leary was on track to have a successful career in the field of psychology.¹⁷³ In 1955, however, Leary's

¹⁷¹ Don Lattin, *The Harvard Psychedelic Club*, 1st ed. (New York, NY: HarperOne, 2010), 15.

¹⁷² Robert Greenfield, *Timothy Leary: A Biography*, 1st ed. (Orlando, FL: Harcourt, 2006), 59.

¹⁷³ Lattin, *The Harvard Psychedelic Club*, 18.

first wife, Marianne, committed suicide and left him with their two young children. In 1958, Leary took his family to Europe in an attempt to escape his grief. While in Florence, Italy, he met David McClelland, who was chair of the Department of Psychology and Social Relations at Harvard University. McClelland had been impressed by Leary's 1957 monograph *The Interpersonal Diagnosis of Personality* and offered him a job lecturing at Harvard.¹⁷⁴

Leary met Richard Alpert when he arrived at Harvard in the fall of 1959. Alpert came from a wealthy Jewish family in Boston. Ignoring his father's insistence that he become a physician, Alpert pursued psychology at Tufts University and Wesleyan University before graduating with his Ph.D. from Stanford University. Notably, while at Stanford, Alpert was introduced to marijuana by Vik Lovell—the same individual who had encouraged Ken Kesey to enroll in the research study at the Menlo Park Veterans Hospital. After holding a visiting professorship at Stanford University, Alpert secured a tenure-track position at Harvard University in 1958.¹⁷⁵

Harvard Psilocybin Project

Leary first experimented with psychedelic drugs in August of 1960 during a trip to Mexico. He and some friends consumed the psilocybin mushroom *psilocybe cubensis*,

¹⁷⁴ Ibid., 20.

¹⁷⁵ Ibid., 1.

which the indigenous people of the region called the “flesh of the gods.”¹⁷⁶ Leary was profoundly affected by the mushrooms and would later describe taking them as “the deepest religious experience of my life.”¹⁷⁷ Upon returning to Harvard in the fall, Leary administered the drug to Alpert, and the two quickly began the Harvard Psilocybin Project.¹⁷⁸ This project recruited faculty members and graduate students from the many local colleges, seminaries, and universities in the Boston area and had them write reports concerning their experiences under the drug.¹⁷⁹ Leary also ran a research project at a maximum security prison in Concord, Massachusetts in which he sought to test if psilocybin experiences could reduce recidivism in young offenders.¹⁸⁰

In addition to his official activities through Harvard, Leary’s house in Newton, Massachusetts became a lively hub of psychedelic experimentation. It is here that Leary administered psychedelic drugs to many prominent Americans, including Allen Ginsberg, William Burroughs, Maynard Ferguson, Alan Watts, and Huston Smith.¹⁸¹ Leary’s home also came to serve as a hangout for the many faculty and graduate students who desired the company of others who had had profound experiences on drugs.

It was not long before the Harvard Psilocybin Project began to draw scrutiny. Several professors within the psychology department at Harvard complained that the project was unscientific. Moreover, there were accusations that Leary and Alpert had

¹⁷⁶ Ibid., 38.

¹⁷⁷ Ibid., 41.

¹⁷⁸ Ibid., 51. Alpert had been in Mexico with Leary during the summer, but all of the mushrooms had been consumed by the time he arrived.

¹⁷⁹ Ibid., 41.

¹⁸⁰ Ibid., 68.

¹⁸¹ Ibid., 54.

created a clique of drug users within the department.¹⁸² This situation was further exacerbated by Leary. He had long held a disdain for authority and tradition, and was ill-suited to introduce controversial theories and methodology to his field. Indeed, Aldous Huxley, who became acquainted with Leary in the fall of 1960, complained to Humphrey Osmond in a letter from December 1962:

It is the reaction of a mischievous Irish boy to the headmaster of his school. One of these days the headmaster will lose patience—and then good-bye to Leary’s psilocybin research. I am very fond of Tim—but why, oh why, does he have to be such an ass? I have told him repeatedly [...] Go about your business quietly, don’t break the taboos or criticize the locally accepted dogmas [...] But evidently the temptation to cock snooks is quite irresistible.¹⁸³

Huxley’s words could not have proved more prophetic. The dispute within the psychology department eventually found its way into Harvard’s student newspaper, *The Crimson*, and was subsequently picked up by local papers. The immediate result of this scrutiny was stricter oversight of the Harvard Psilocybin Project and the group losing direct control over their supply of psilocybin.¹⁸⁴ After this debacle, many within the Harvard administration wanted Leary and Alpert out of the university.

The ultimate downfall of the two men was brought about by an eighteen-year-old undergraduate named Andrew Weil, who would go on to become a famous physician and advocate of holistic medicine. Weil bore a grudge against Leary and Alpert. He had approached the pair and requested to participate in their research, but was denied on the grounds that the university forbade the Harvard Psilocybin Project from experimenting

¹⁸² Ibid., 87.

¹⁸³ Greenfield, *Timothy Leary: A Biography*, 193.

¹⁸⁴ Lattin, *The Harvard Psychedelic Club*, 91.

on undergraduates. Weil became bitter when he learned that one of his close friends, Ronnie Winston, had managed to befriend Alpert and was receiving psilocybin from him.¹⁸⁵ Feeling excluded, Weil exploited his position as a columnist with *The Crimson* to write a follow-up story. The exposé disclosed Alpert's breach of the university's rules in providing psilocybin to an undergraduate and was highly critical of the ultimate intent of both Leary and Alpert, stating:

The shoddiness of their work as scientists is the result less of incompetence than of a conscious rejection of scientific ways of looking at things. Leary and Alpert fancy themselves prophets of a psychic revolution designed to free Western man from the limitations of consciousness, as we know it. They are contemptuous of all organized systems of action—of what they call the “roles” and “games” of society. They prefer mystical ecstasy to the fulfillment available through work, politics, religion, and creative art. Yet like true revolutionaries they will play these games to further their own ends.¹⁸⁶

Weil's investigative reporting, which was supported and encouraged by the Harvard administration, resulted in the university firing Leary and Alpert in the spring of 1963. The story was picked up by the national news media, and was also discussed in an article Andrew Weil wrote for *Look* magazine in November of 1963, bringing further mainstream attention to psychedelic drugs and the activities of Leary and Alpert.¹⁸⁷

¹⁸⁵ Ibid., 92.

¹⁸⁶ Joseph Russin and Andrew Weil, “Corporation Fires Richard Alpert for Giving Undergraduates Drugs,” *The Harvard Crimson*, May 28 1963.

¹⁸⁷ Lattin, *The Harvard Psychedelic Club*, 92. Andrew T. Weil, “The Strange Case of the Harvard Drug Scandal,” *Look Magazine*, November 1963.

Creation of The League for Spiritual Discovery

By the time Leary and Alpert were fired from Harvard, the pair was already prepared to move on from the confines of academia in many respects. They had founded their own independent organization, The International Federation for Internal Freedom, which would eventually be renamed The Castalia Foundation, and later The League for Spiritual Discovery. Their movement had also accumulated enough committed followers to prompt Alpert to purchase a large house in Newton to serve as a communal home.¹⁸⁸ Leary and Alpert had also found a new source of patronage in a young woman named Peggy Hitchcock and her brothers William and Tom. The three Hitchcocks were heirs to the fortune of banker Andrew Mellon and were eager to fund Leary and Alpert's work.¹⁸⁹ In this way, Leary and Alpert no longer needed Harvard's support. Moreover, without the need to justify the usefulness of their activities to the field of psychology they were free to explore and evangelize psychedelic drugs as they pleased.

By the summer of 1963, Leary and Alpert had turned their attention from psilocybin to LSD, which the former had first sampled in December of 1961.¹⁹⁰ Leary and Alpert spent much of this summer running their experiments out of a hotel in Zihuatanejo, Mexico. With them in Mexico was a Harvard graduate student named Ralph Metzner, who had helped with Leary's prison experiments and was an increasingly important member of the movement. American news organizations soon publicized their

¹⁸⁸ Lattin, *The Harvard Psychedelic Club*, 98.

¹⁸⁹ Ibid., 102.

¹⁹⁰ Ibid., 62, 64.

activities in Mexico, which led to many individuals traveling to Zihuatanejo to seek their first psychedelic experience. Towards the end of the summer, the Mexican authorities kicked the organization out of their country.¹⁹¹

Establishment of Commune to Millbrook, New York

In the fall of 1963, the organization relocated to Millbrook, New York, where the Hitchcocks acquired a 64 room gothic mansion that would serve as their headquarters for much of the Sixties. It is here that Leary, Alpert, and Metzner continued their experiments and held seminars on obtaining altered states of consciousness through meditation, dance, breathing exercises, and sensory deprivation.¹⁹²

By the summer of 1964, Leary, Alpert, and Metzner had published their first book entitled *The Psychedelic Experience: A Manual Based on The Tibetan Book of the Dead*.¹⁹³ This book was the first guide on how to administer and experience psychedelic drugs, and drew on the *Bardo Thodol*—a Tibetan text containing instructions on how to guide an individual into the afterlife. It was also this summer that Ken Kesey and his Merry Pranksters visited Millbrook in their painted bus. The visit, arranged by Allen Ginsberg, was embraced with enthusiasm by the Pranksters, who were eager to meet their counterparts on the East Coast.¹⁹⁴ Indeed, the two groups had a lot in common. Both had

¹⁹¹ Ibid., 108.

¹⁹² Ibid., 111-12.

¹⁹³ Timothy Leary, *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead*, (New York, NY: University Books, 1964).

¹⁹⁴ Gibney and Ellwood, “Magic Trip.”

embraced a communal lifestyle that centered on the use of psychedelic drugs, and shared the belief that drugs were a powerful force capable of altering perception and exposing the “games” of everyday life. The two groups ultimately found each other to be very different in other ways, however. While the Pranksters thought that Alpert was friendly, they found Millbrook and most of its inhabitants to be WASPy and pretentious.¹⁹⁵ Indeed, nothing about the Pranksters resembled the Harvard pedigree of Leary and Alpert. Moreover, the two groups approached the consumption of psychedelic drugs very differently. The Pranksters readily incorporated psychedelic drugs into their everyday lives. Moreover, while they embraced psychedelic drugs as a means to enlightenment, they also enjoyed their ability to elicit spontaneous acts of creativity and silliness. Conversely, Leary and Alpert preferred to consume psychedelics in a carefully controlled “set and setting” (mindset and environment). They took a pseudo-religious approach to drugs, sought inspiration from Eastern texts such as the *Bardo Thodol* (commonly called “The Tibetan Book of the Dead”), and consumed the substances in a ritualistic manner.¹⁹⁶ Hence, despite some shared values, there was a lack of synergy between the Pranksters and Millbrook, and no lasting relationship was formed between the two groups.

In 1965, Leary had a falling out with Alpert. After spending some time abroad, Leary returned to Millbrook and accused Alpert of turning the estate into a playground for rowdy sexual deviants. Moreover, Leary became paranoid that Alpert, who had long been a nurturing figure to Leary’s two children, was attempting to seduce his fifteen-

¹⁹⁵ Ibid.

¹⁹⁶ Lattin, *The Harvard Psychedelic Club*, 70.

year-old son Jack. Alpert left Millbrook and eventually ended up in India, where he discovered Hinduism and changed his name to Ram Dass before returning to America in 1968 to promote Eastern teachings. Leary continued on his mission to bring about a psychedelic revolution, which came increasingly intertwined with the broader counterculture movement that flourished in the middle of the Sixties.

His Revolutionary Philosophy of Psychedelic Drugs

Perhaps the most comprehensive and insightful view into Leary's psychedelic doctrine and personality came in a high-profile interview Leary gave for the September 1966 issue of *Playboy* magazine. In this feature, Leary eloquently describes the effects of LSD on one's senses and consciousness. He discusses the drug, its history, and politics in an erudite manner that illustrates the intellectual rigor that once earned him a job at Harvard but also betrays his affinity for controversy and grandiose statements. He discloses his belief in a generational divide between those who were under 25 years of age and those who are older. Leary extols the former for belonging to the "wisest and holiest generation the human race has ever seen," and asserts that their consciousness is "light years" beyond that of their parents.¹⁹⁷ He also discusses his proposal for a "cease fire" in the use of LSD and marijuana by young people, which he advocated as a means of mitigating the growing divide between the generations. Leary believed that older

¹⁹⁷ Timothy Leary, "Interview with Timothy Leary," *Playboy*, September 1966, 94.

generations had fallen too far behind and that such an “evolutionary misunderstanding” could result in bloodshed and incarceration.¹⁹⁸

The interview also contains one of the earliest mentions of Leary’s famous motto “turn on, tune in, drop out,” which also appeared as the title of a spoken-word LP that Leary released the same year as the article.¹⁹⁹ “Turn on,” Leary explains, means to access the inherent wisdom and knowledge of the nervous system; “tune in,” to harness these insights and apply them harmoniously to the outside world; “drop out,” to detach oneself from the “tribal games” of society.²⁰⁰ This motto, especially the imploration to “drop out,” would go on to be repeated and contorted by Leary’s critics as evidence of the danger he posed to America’s youth. Leary also raised eyebrows with his discussion of sexual experiences under the influence of LSD. In a statement that surely concerned advocates and critics of LSD alike, he asserted:

Since there is hardly anything more that middle-aged, middle-class authority can do to me—and since the secret is out anyway among the young—I feel I’m free at this moment to say what we’ve never said before: that sexual ecstasy is the basic reason for the current LSD boom.²⁰¹

He also argued LSD to be a potential cure for homosexuality, and stated that a woman having sex on the drug will inevitably have several hundred orgasms.²⁰²

Over time, Leary’s psychedelic doctrine became increasingly controversial. In addition to notions of intergenerational conflict, “dropping out,” and drug-fuelled sexual

¹⁹⁸ Ibid.

¹⁹⁹ Timothy Leary, *Turn On, Tune In, Drop Out*, ESP-DISK 1027, LP, 1966. True to form, Leary begins this LP with a warning that people over the age of 40 may not want to listen to the record as the subsequent content might make them mad.

²⁰⁰ “Interview with Timothy Leary,” 99.

²⁰¹ Ibid., 96.

²⁰² Ibid.

ecstasy, Leary began to embrace philosophies that resembled Nietzschean self-deification. In a pamphlet entitled *Start Your Own Religion* (1967), he wrote:

You must start your own religion. You are God—but only you can discover and nurture your divinity [...] Your life begins when your TV game ends. Turn on, tune in, drop out. Then you are free to walk out of the studio—a *god* in the Garden of Eden. ²⁰³

The controversial nature and revolutionary tone of Leary's advocacy in the late Sixties caused many of the more moderate, intellectual advocates of psychedelic drugs, such as Huston Smith and Humphrey Osmond, to distance themselves from him. Moreover, Leary remained a steadfast cheerleader for popular drug culture, while many who had been hopeful about the intellectual prospects of psychedelic drugs early in the decade had since become disillusioned with the hedonism and escapism of this mass movement.²⁰⁴

His Opprobrium and Time as an International Fugitive

By the late Sixties, Leary was also becoming increasingly unpopular with the American public. The mainstream media had been publishing articles reporting that LSD and other psychedelic drugs were “out of control” since the mid-Sixties.²⁰⁵ To make matters worse, Leary was also under the scrutiny of law enforcement and was facing jail time for two separate incidents involving the possession of marijuana. In May of 1969, shortly after announcing his candidacy for Governor of California (for which John

²⁰³ Leary, *Turn on, Tune in, Drop Out*, 7, 16. (Compilation of Leary's Essays and Private Publications)

²⁰⁴ Lattin, *The Harvard Psychedelic Club*, 142.

²⁰⁵ See for example the feature piece in the March 26, 1966 edition of *Life* magazine.

Lennon wrote “Come Together” to serve a campaign song), Leary was sentenced to 20 years in jail.

Notably, this was not the end of Leary’s escapades. In September of 1970, he escaped from a minimum security jail outside San Luis Obispo with the help of the militant group The Weather Underground. After obtaining a passport with fake identification, Leary traveled to Algeria where he stayed under the protection of Eldridge Cleaver and the Black Panthers and issued a series of manifestos encouraging youth back in America to revolt.²⁰⁶ Leary soon had a falling out with the Panthers over his refusal to denounce LSD and share royalties from his escape story, and was held captive by them. Leary eventually escaped from the Panthers and fled to Switzerland where he was protected by a wealthy embezzler and arms merchant named Michel-Gustave Hauchard. The Swiss rejected American requests for extradition but also denied Leary political asylum, and in January of 1973 he was forced to leave Switzerland. After a brief stop in Beirut, Leary arrived in Kabul, Afghanistan where he was apprehended by U.S. agents and returned to California.²⁰⁷

Leary was sentenced to 35 years in prison for his possession of marijuana and escape from prison. To lessen his sentence, Leary became a federal informant. He gathered and disclosed information on their friends and associates in the drug scene, and in April of 1976 Leary walked out of jail under the Federal Witness Protection Program.²⁰⁸

²⁰⁶ Lattin, *The Harvard Psychedelic Club*, 170.

²⁰⁷ Ibid., 172-98.

²⁰⁸ Ibid., 199.

The Detrimental Effect of his Actions upon Intellectual Drug Culture

There are many who blame Leary for stoking the American public's animosity towards psychedelic drugs, and perverting the intellectual approach to these substances that was championed by people like Aldous Huxley. Sociologist Phil Slater once remarked, "What Leary did more than anything else was activate conservative anxiety in America."²⁰⁹ In this way, the enemies of psychedelic drugs were happy to embrace Leary as the figurehead of drug culture. Leary was a self-serving, arrogant hedonist whose lust for attention and heavy drug use led him to act in an unpredictable—seemingly “unhinged”—manner. His behavior and beliefs stirred a host of fears harbored by mainstream Americans, such that Richard Nixon felt it appropriate to label him “the most dangerous man in America.”²¹⁰

BRANCHES OF DRUG CULTURE ESTABLISHED IN THE SIXTIES

Within the Western world, there has been an intimate relationship between psychoactive drugs and deep-seated fears surrounding the cultures they are perceived to represent. Prior to the Sixties, this dynamic manifested itself between immigrants, the substances they brought with them, and the dominant culture of their new country. In the Sixties, however, this dynamic played out between mainstream American society and a

²⁰⁹ Ibid., 214.

²¹⁰ Ron Chepesiuk, *The War on Drugs: An International Encyclopedia* (Santa Barbara, CA: ABC-CLIO, 1999), 118.

powerful counterculture movement that emerged from within the country itself. In this way, psychedelic drugs were agents in a cultural “civil war” that was raging between white, middle- to upper-class Americans.

A myriad of drug cultures emerged in the United States during the Sixties, but I believe that most took one of three approaches to understanding drugs. The first, I term the “intellectual” approach, which focuses on psychedelic drugs as a means of education. Aldous Huxley and Humphrey Osmond are the foremost champions of this branch. The second, championed by Ken Kesey in his early years, I consider the “experiential” approach. This branch focuses on exploring the subjective “games” and “fantasies” of individuals through psychedelic experience. It is an apolitical understanding with no set agenda that values drug-induced experiences of sensual and emotional pleasure, as well as those bearing philosophical insight. The third branch I term the “revolutionary” approach, of which Timothy Leary is the foremost representative. This branch understands psychedelic drugs to be a force that will bring about an enlightenment of the masses that will lead to a social revolution. This movement had a Marxist overtone and perceived drugs to be an important agent in the evolution of humanity. Notably, all three branches have interest in bringing about social change, but had disparate visions as to the manner in which this change should unfold: Huxley preferred it through institutionalized learning, Kesey through the spread of a lifestyle, Leary through a revolution of enlightened youth.

CHAPTER 2

EMERGENCE OF PSYCHEDELIC MUSIC IN CALIFORNIA, NEVADA, AND TEXAS

A FRAMEWORK FOR UNDERSTANDING PSYCHEDELIC MUSIC

This chapter explores how the term “psychedelic” and the ideas it evoked came to be applied to popular music in the Sixties. Specifically, it focuses on music that came out of California, Nevada, and Texas in the mid-Sixties, which was among the first to receive this descriptor. The term has, without question, been loosely applied to a broad spectrum of disparate musics, making the words “psychedelic music” ambiguous to the point that they are relatively meaningless as a descriptor of sound. This plurality of meaning is partly the fault of the record industry, which eschewed references to drugs for much of the Sixties, but aggressively sold music as “psychedelic” once the term proved to be an effective marketing strategy.²¹¹ Today, listeners and music historians use the term “psychedelic music” to broadly refer to a perceived relationship between music and drugs.

Defining “Psychedelic Music”

To understand the various connotations of the term “psychedelic music,” I wish to posit the following framework, which asserts that there are three, non-mutually exclusive means by which most music comes to be considered “psychedelic”: (1) it had a “surreal” aesthetic, (2) the artist(s) who created it sought to enhance, emulate, or verbally express

²¹¹ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 177.

aspects of the effects of psychedelic drugs, (3) it emanated from a subculture in which psychedelic drugs figured prominently.²¹²

The first category describes the myriad of music that has earned the description simply by sounding surreal or otherworldly. The 1960s saw several major revolutions in the recording studio, which enabled artists to manipulate existing sounds, synthesize new ones, and mix several layers of them together through multi-tracking. The music of other artists received this label by incorporating features that defied the norms of Western music, such as unconventional forms and textures, exotic chords and scales, extended improvisatory passages and other oddities. The result was music that seemed divorced from the natural world, which served as a fitting soundtrack to the otherworldly experiences some people were having on psychedelic drugs. In this way, the relationship of this music to psychedelic drugs existed in listeners' associations with the aesthetic—the artist's intent and relationship with drugs are irrelevant. An artist that exemplifies the nature of this category is Frank Zappa. Zappa was extremely vocal in his disdain for drugs and by all accounts did not use them.²¹³ Nevertheless, the odd nature of his music has often resulted in it being described as “psychedelic.”²¹⁴

²¹² I use the term “surreal” to describe sounds that would arguably be perceived as “dreamlike” or “otherworldly” by American listeners in the Sixties. For a discussion of this term and its use in literature and visual art see Jacqueline Chénieux-Gendron, *Surrealism* (New York, NY: Columbia University Press, 1990)

²¹³ Kelly Fisher Lowe, *The Words and Music of Frank Zappa* (Lincoln, NB: University of Nebraska Press, 2007), 44.

²¹⁴ James E. Perone, *The Album: A Guide to Pop Music's Most Provocative, Influential, and Important Creations*, 4 vols., vol. 1 (Santa Barbara, CA: Praeger, 2012), 278, Lowe, *The Words and Music of Frank Zappa*, 36. The Wikipedia entries for Zappa's albums *Freak Out!* (1966) and *We're Only in It for the Money* (1968) classify them as belonging to the “psychedelic” genre as of May 6, 2014.

The second category focuses entirely on an artist's intent to connect his or her music to the experience of psychedelic drugs. In some instances, this relationship may be as simple as the description of a drug-induced experience within the lyrics of a song. In others, the artist may have established this relationship by either *emulating* or *enhancing* the experience of drugs in his or her music. Artists seeking to *emulate* these substances did so by incorporating sounds and musical structures that either were emblematic of the sensory effects of psychedelic drugs or created perceptual distortions that imitated their psychological effects. Notably, this facet of psychedelic music mirrors the definition of "acid rock" found in Lillian Roxon's *Rock Encyclopedia* published during the Sixties:²¹⁵

Acid rock was music that tried to reproduce the distorted hearing of a person under the influence of lysergic acid diethylamide (LSD). The idea was to recreate for someone who was not drugged the illusion of an LSD experience through music.²¹⁶

Artists seeking to *enhance* the experience of psychedelic drugs would incorporate sounds and musical structures that played upon the altered sensibilities of listeners who were experiencing them under the effects of a substance. This dynamic was very much like a modern 3D movie, with the music serving as the film and the listener's drugs functioning as 3D glasses that enable him or her to appreciate special features embedded by its creator.

The last category is comprised of music that is essentially "psychedelic by association." Music belonging to this category may not sound that different from non-

²¹⁵ "Psychedelic music" is cross referenced with "acid rock" in Roxon's encyclopedia.

²¹⁶ Lillian Roxon, "Acid Rock," in *Rock Encyclopedia* (New York, NY: Workman's Publishing Company, 1969).

psychedelic music, and drugs may not have been a factor in its creation. Nevertheless, it is considered to be psychedelic by some because it is association with, or the *product* of, a psychedelic subculture. The foremost example of this category is the music of the Grateful Dead. While a small handful of the band's songs bear a typical "surreal" psychedelic sound, the vast majority of their music was a blend of more conventional folk, blues, and rock idioms. The emulation and enhancement of drugs were not stated goals of the band, and few of their lyrics had anything to do with drugs. Nevertheless, psychedelic drugs were central to the lifestyle of the band and its Deadhead followers. In this way, drugs and music were often independent, yet intimately woven threads within the fabric of the Dead subculture. Moreover, as I will discuss later in this dissertation, there are several ways in which the influence of psychedelic drugs can be appreciated in the *processes* through which the Dead's music was performed and enjoyed.

Constructing a Narrative of the Emergence of Psychedelic Music

The following narrative is a chronological account of the emergence of psychedelic music. It specifically focuses on developments in the early to mid-1960s that eventually culminated to form psychedelic music, its performance practices, and culture. While the beginning of this chapter details music that set important precedents for the sound, style, and concept of psychedelic music, most of the artists, music, and events I have chosen to discuss in this chapter have been selected for one of two reasons. In some instances, the artists involved seem to have consciously enhanced, emulated, or expressed

the effects of drugs in their songs, constituting an intimate interaction between psychedelic drugs and music. In others, the music I discuss was known to be popular among people who enjoyed psychedelic drugs, especially that of artists who were regular acts at venues known for mixing the experience of live music with these substances. The narrative attempts to avoid the tendency to indiscriminately chronicle odd-sounding songs from the mid-Sixties, which plagues many histories of psychedelic music. In contrast to most histories of this music, I avoid using the term “psychedelic rock.” I believe the prevalence of this term is largely due to rock’s perceived monopoly on electrified instruments and their common three- to six-person arrangements, as well as the fact that drugs are a fitting addition to the genre’s history of subversion. The following pages will evidence the degree to which songs that came to be labeled “psychedelic” drew elements from several genres in addition to rock n’ roll. Hence, while there are certainly specific songs and albums that could be classified as “psychedelic rock,” when discussing the larger catalog of psychedelic songs from Sixties I use the broader term “psychedelic music.”

CHRONOLOGICAL HISTORY OF THE EMERGENCE OF PSYCHEDELIC MUSIC

Early Developments in the Evolution of Psychedelic Music

The early 1960s witnessed several developments that would eventually influence the growth of psychedelic music. Surf rock and electrified folk music in particular set several important musical precedents that were eventually incorporated into the genre.

Conceptually, there were also several songs in the early Sixties that referenced drugs in some capacity. Most of these songs arguably had little to no impact on the musical content of psychedelic music, but nevertheless introduced the idea of a “psychedelic song” to those that encountered them.

Surf Rock (1961-1962)

Psychedelic music borrowed several precedents from the genre of rock n’ roll. Most psychedelic bands in the Sixties employed the basic instrumental arrangement of rock bands from earlier in the decade, featuring a singer, electric lead guitar, electric rhythm guitar, electric bass guitar, and drum kit. It also incorporated various sounds from black American blues and “boogie woogie” music that had been folded into the rock n’ roll genre over the course of the 1950s. In contrast to other genres of popular music, however, psychedelic music arguably inherited much of its rock n’ roll sound from surf rock, a subgenre of rock that was popular on the West Coast that had a distinct lineage from rock music that was inspired by the British Invasion.

Surf music was arguably the first novel rock n’ roll sound to originate in the 1960s. It was started by Dick Dale, an avid surfer and guitarist from Southern California who developed a friendship with Leo Fender in the late Fifties.²¹⁷ Fender had been tinkering with radios since high school. In the 1940s, he and a business partner began

²¹⁷ Ben Marcus and Jeff Divine, *Surfing USA!: An Illustrated History of the Coolest Sport of All Time* (Stillwater, MN: Voyageur Press, 2005), 83.

manufacturing amplifiers and electric lap steel guitars to meet the burgeoning demand for Hawaiian and western swing music. In 1950, Fender introduced his solid-body Esquire electric guitar model, which was soon followed by the Telecaster model that same year. In 1954, he introduced his Stratocaster model, which remains the most popular electric guitar ever made.²¹⁸ Leo Fender would ask Dick Dale to test his company's equipment, and while Dale seemed to have few complaints with the Stratocaster, the extreme volume at which he liked to play was constantly "blowing up" Fender's amplifiers. When Fender asked Dale why he played so loud, the latter explained that he sought to imitate the dynamism and expression of big band drummer Gene Krupa on the guitar. In 1960, Leo Fender created an amp to meet the challenges of Dale's guitar playing. He designed a special 85 watt transformer that was capable of peaking at 100 watts, and paired it with a special 15" speaker to make the Fender "Showman."²¹⁹ Together, the Stratocaster guitar and Showman amp were capable of producing volume levels and "overdriven" tone colors that were distinct from those used by Fifties rockers like Bill Haley and Chuck Berry. Equipped with Leo Fender's hardware, Dale began the surf music craze with his 1961 hit "Let's Go Trippin'." On this track, one can hear the novel tone color of Dale's guitar; the instrument's signal still "clipped" from the high volume levels, but it was nevertheless able to sustain a richness of tone color.²²⁰

²¹⁸ Ibid.

²¹⁹ Ibid.

²²⁰ Clipping is a form of waveform modification that occurs when an amplifier attempts to deliver an output voltage or current beyond its maximum capability, and is the means through which electric guitars commonly create audio effect commonly called "distortion."

While “Let’s Go Trippin’” premiered new guitar sounds and technology that would have an enduring influence on rock music in the Sixties, it was Dale’s 1962 single “Misirlou” that foreshadowed several of the conceptual and aesthetic tenets of psychedelic music. “Misirlou” featured a more distorted variant of Dale’s overdriven sound, which was imbued with an intensity and aggressiveness that was unlike anything heard in the Fifties. Moreover, the entire track is drenched in a reverb effect that lends it a unique ambiance. The melodic theme of “Misirlou” was an arrangement of a traditional Middle Eastern melody by the same name, which Dale had learned from his Lebanese uncle who played the *oud*.²²¹ It employed a scale very similar to the Western harmonic minor scale, but with the third scale degree occasionally raised to a major third. Dale performed the melody entirely on the top string of his Stratocaster using a tremolo picking technique, accompanied by percussion and a horn section. The track set many important precedents that would be continued in psychedelic music. The first precedent was the song’s *surreal* production value; the sound of Dale’s guitar and the concentrated reverb effect resulted in a track that was quite divorced from the world of natural acoustics. The second was its use of an exotic “Eastern” sound to create a sense of otherworldliness for many listeners. Lastly, Dale set an important precedent through his artistic intentions. In writing “Misirlou,” he sought to impart the sensation of surfing to his listener. Dale had been drawn to rock n’ roll through his belief that the genre best matched the feelings he had while surfing. In his words, he desired: “the vibration and

²²¹ Marcus and Divine, *Surfing USA!: An Illustrated History of the Coolest Sport of All Time*, 82.

pulsation, and the tremendous power.”²²² In “Misirlou,” he developed a musical language to further express these feeling that was rooted in musical onomatopoeia:

I’m into just chopping, chopping at 60 gauge, 50 gauge strings. That’s the sound...the sound of waves chopping. The surfing sound is not the reverb [...] It’s the heavy machine gun, staccato sound...the waves.²²³

In this way, “Misirlou” and other works foreshadowed the *emulative* approach to psychedelic music: he sought to impart the feeling of surfing to his listeners much like many psychedelic bands sought to give their listeners the experience of drugs through their music.²²⁴

Surf music would eventually expand to include other instrumental acts like the Ventures, as well as vocal groups like Jan and Dean and the Beach Boys. The surf music of these vocal groups often dwelled upon the artifacts of surf culture, such as beautiful girls and fast cars, in contrast to Dale’s quest to impart the sensation of riding the waves.²²⁵ Nevertheless, the larger genre of surf music set another precedent—albeit superficial—in the history of psychedelic music. In the 1950s, American culture developed a fetish for products that looked or sounded futuristic. In the genre of surf rock, these desires manifested themselves in song names that sounded very much like code names for prototypes of new Cold War weapons. Examples include Dick Dale’s “My X-KE” (named after a model of Jaguar sports car), the Majestic’s “X-L3,” and the Tornados’ “7-0-7.” Keeping with this practice, in 1961 a surf rock group from Los

²²² Ibid.

²²³ Ibid., 86.

²²⁴ Morrison, “Psychedelic Music in San Francisco: Style, Context, and Evolution”, 69.

²²⁵ Notably, Brian Wilson of the Beach Boys became an important creator of psychedelic music after the group had moved on from their surf-themed music in the mid-Sixties.

Angeles called the Gamblers titled the instrumental B-side of their “Moondawg” single “LSD-25.” It was written in a standard twelve-bar blues form and had no connection to psychedelic experience or culture. The authors of the song, Sam Taylor and Derry Weaver, had simply heard the drug’s abbreviation in a magazine and like the sound of it.²²⁶ Nevertheless, the song seems to be the first instance that LSD is mentioned in music, and its backstory is anecdotal evidence of the drug’s gradual incorporation into the American lexicon.

Folk Music (1964-1965)

The late 1950s witnessed a revival of folk music in the United States. This revival was a distant continuation of an earlier folk revival movement that occurred over two decades earlier. In the 1930s, musicians such as Pete Seeger, Woody Guthrie, Alan Lomax, Lead Belly, and Josh White revived various folk songs and traditions as a means of protesting war, racism, and labor injustice in the United States. In the Forties, the movement was disrupted by the Second World War, which put Seeger, Guthrie, and others into the military. The movement was further suppressed by the communist witch hunt that ensued thereafter.²²⁷ In the early Fifties, the Weavers kept the embers of the folk revival burning with songs like “Goodnight, Irene” (1950), “Tzena, Tzena” (1951), and

²²⁶ Michael Hicks, *Sixties Rock: Garage, Psychedelic, and Other Satisfactions*, Music in American Life (Urbana, IL: University of Illinois Press, 1999), 59.

²²⁷ Ronald D. Cohen, *Folk Music: The Basics*, Routledge Student Reference (New York, NY: Routledge, 2006), 78.

“Wimoweh” (1952). Their hits made Pete Seeger—the band’s most popular member—a household name.²²⁸ It was not until 1958 when the Kingston Trio released their version of “Tom Dooley” that the mid-century folk revival started in earnest. This song sold over one million copies and prompted record companies of all sizes to seek out folk talent. By the early Sixties, folk music was especially popular on college campuses where it was fashionable for students to collect folk LPs, study Child ballads, and learn folk instruments.²²⁹ Subscriptions to folk magazines such as *Sing Out! And Broadside* flourished, and scenes where folk musicians would commonly gather and play began to form in major urban centers.²³⁰

As with surf music, the earliest interaction between psychedelic drugs and folk music seems to be a superficial textual reference. It occurred in a 1964 cover of Leadbelly’s “Hesitation Blues” by a folk group from New York City called the Holy Modal Rounders. To the original song, the Rounders casually added the lyric “got my psychedelic feet in my psychedelic shoes / I believe, Lordy Mama, I got the psychedelic blues.” While the Rounders would go on to write some extremely adventurous psychedelic folk music on their 1968 album *The Moray Eels Eat The Holy Modal Rounders*, the “Hesitation Blues” reference seems largely superficial, nestled among other quirky verses set to a folksy rendition of a blues standard.

²²⁸ Kip Lornell, *Exploring American Folk Music: Ethnic, Grassroots, and Regional Traditions in the United States*, 3rd ed. (Jackson, MS: University Press of Mississippi, 2012), 289.

²²⁹ Ibid., 292.

²³⁰ Ibid. Washington Square in the Greenwich Village neighborhood of New York City was among largest and most renowned of such scenes to form.

American folk music has a long tradition setting of verbose, thoughtful, and sometimes subversive texts. These traits, in addition to the genre's proclivity to disseminate without popular support, are arguably the reason that Americans have repeatedly employed it as a means of expressing controversial political, religious, and historical viewpoints. Hence, it is not surprising that the genre would play an important role in the new drug culture that was slowly emerging in the Sixties.

Bob Dylan's *Bringing It All Back Home* was an influential album in American folk music that contributed to the development of psychedelic music. Released in March of 1965, the A-side of this LP consisted entirely of folk played on electric instruments instead of their traditional acoustic counterparts. Dylan's venture into "electric folk" was a major development in the folk revival, which was met with disdain by members of the movement who were more traditional.²³¹ It expanded upon a new style of folk music that was established by the British group the Animals in their electric version of the classic folk ballad "The House of the Rising Sun," which was released in June of 1964. The B-side of *Bringing It All Back Home* contained an acoustic version of Dylan's song "Mr. Tambourine Man." Since its release, many have considered the song to be about drugs given its reference to "trips" and "smoke rings" of the mind:

Take me on a trip upon your magic swirlin' ship
My senses have been stripped, my hands can't feel to grip
My toes too numb to step, wait only for my boot heels
To be wanderin'

Then take me disappearin' through the smoke rings of my mind
Down the foggy ruins of time, far past the frozen leaves
The haunted, frightened trees, out to the windy beach

²³¹ Anthony Varesi, *The Bob Dylan Albums: A Critical Study* (Toronto: Guernica, 2002), 72.

Far from the twisted reach of crazy sorrow.²³²

Though Dylan is known to have been experimenting with drugs at this point in his career, he has never attributed the song to the influence of drugs, and suggests in the liner notes of his *Biograph* box set that Federico Fellini's film *La Strada* was its inspiration.²³³ Regardless of Dylan's intent, the text of "Mr. Tambourine Man" set some important precedents for the psychedelic music that would follow. The verses of the song were very introspective in comparison to other songs of the period. This had been a growing trend in Dylan songs, which had prompted Irwin Silber, the editor of *Sing Out!*, to write an open letter to Dylan complaining that his new songs seem to be "inner-directed now, inner-probing, self-conscious."²³⁴ In "Mr. Tambourine Man," this introspection manifests itself in a very personal account of a surreal experience. In describing it, the narrator shares not only what his senses are witnessing, but also his intimate emotional responses to the encounter:

I'm ready to go anywhere, I'm ready for to fade
Into my own parade, cast your dancing spell my way
I promise to go under it.²³⁵

Many listeners who were familiar with marijuana and other psychedelic drugs would relate the song's lyrics to the sensual and emotional experience of taking these substances. Describing his own anecdotal experience with the song in a book about the Sixties, Todd Gitlin writes:

Mr. Tambourine Man went down especially well with marijuana, just then making its way into dissident campus circles. The word got around that in

²³² Bob Dylan, *Bringing It All Back Home* (New York, NY: Columbia CL 2328, 1965).

²³³ Varesi, *The Bob Dylan Albums: A Critical Study*, 52.

²³⁴ Irwin Silber, "An Open Letter to Bob Dylan," *Sing Out!* 14, no. 5 (November 1964).

²³⁵ Bob Dylan, *Bringing It All Back Home* (New York, NY: Columbia CL 2328, 1965).

order to “get” the song, and others like it, you had to smoke this apparently angelic drug. It wasn’t just peer pressure; more and more, to get access to youth culture, you had to get high. Lyrics became more elaborate, compressed, and obscure, images more gnarled, the total effect nonlinear, translinear. Without grass, you were an outsider looking in.²³⁶

While the text of Dylan’s “Mr. Tambourine Man” was conceptually groundbreaking, the music it was set to was quite traditional and in no way surreal. In April of 1965, a mere month after Dylan released *Bringing It All Back Home*, a band from Los Angeles named the Byrds released a cover version of the song that paired a shortened version of Dylan’s lyrics with the “jingle jangle” guitar sound that would become permanently associated with early psychedelic music. This sound was created using audio compression to extend sustained notes on Roger McGuinn’s electric guitar.²³⁷ Audio compressors were originally used to normalize the volume of audio feeds to prevent equipment damage or distortion from signal clipping. A heavily compressed signal eventually loses both the attack and diminution of its amplitude, resulting in sounds that maintain a static volume (without fading). Discussing the discovery of this effect McGuinn recounts:

The “Ric” [Rickenbacker guitar] by itself is kind of thuddy; it doesn't ring. But if you add a compressor, you get that long sustain. To be honest, I found this by accident. The engineer, Ray Gerhardt, would run compressors on everything to protect his precious equipment from loud rock and roll. He compressed the heck out of my 12-string, and it sounded so great we decided to use two tube compressors in series, and then go directly into the board. That's how I got my “jingle-jangle” tone. It's really squashed down, but it jumps out from the radio.²³⁸

²³⁶ Todd Gitlin, *The Sixties: Years of Hope, Days of Rage* (New York, NY: Bantam Books, 1987), 201.

²³⁷ Roger McGuinn was still using his birth name, Jim, when this song was released. I refer to him as “Jim McGuinn” throughout this dissertation since he is better known by this name.

²³⁸ Christopher Hjort, *So You Want to Be a Rock 'N' Roll Star: The Byrds Day-by-Day, 1965-1973* (London, UK: Jawbone Press, 2008), 24.

The aesthetic of McGuinn's guitar sound was the perfect complement to Dylan's dreamy verse. Moreover, this more accessible cover version topped the American Billboard charts by June of 1965, bringing Dylan's lyrics and the "jingle jangle" sound of electric folk to mainstream America.²³⁹

The music industry came to call the Byrds' new sound "folk rock" and moved to capitalize on the new genre. The corporate interest in folk rock was so great that the next major hit to emerge was written by an artist who did not play electric folk music. Back in March of 1964, two folk artists from New York named Paul Simon and Art Garfunkel recorded an album of acoustic music for Columbia Records entitled *Wednesday Morning, 3AM*. The album was released in October of 1964 and was unsuccessful, in part, due to it coinciding with the height of Beatlemania in the United States.²⁴⁰ The subsequent success of folk rock groups like the Animals and the Byrds prompted the album's producer, Tom Wilson, to revisit it. He took the duo's acoustic version of the song "The Sound of Silence" and overdubbed electric guitars, bass, and drums onto the track—without consulting either artist. Columbia then released the new mix as a single in November 1965, which topped the U.S. charts for the first few weeks of 1966.²⁴¹

"The Sound of Silence" shared much in common with "Mr. Tambourine Man." Like the latter song, "The Sound of Silence" described surreal imagery that was uncharacteristic of songs that commonly occupied the top spot on the *Billboard 100* at that time:

²³⁹ Richie Unterberger, *Eight Miles High: Folk rock's Flight from Haight-Ashbury to Woodstock* (Berkeley, CA: Backbeat Books, 2003), xi.

²⁴⁰ Pete Fornatale, *Simon & Garfunkel's Bookends* (New York, NY: Rodale, 2007), 39.

²⁴¹ Laura Jackson, *Paul Simon: The Definitive Biography* (New York, NY: Citadel Press, 2002), 90.

And the people bowed and prayed
To the neon god they made
And the sign flashed out its warning
In the words that it was forming
And the sign said, "The words of the prophets are written on the subway
walls
And tenement halls
And whispered in the sound of silence."²⁴²

Garfunkel has stated that the song is about "the inability of people to communicate with each other, not particularly internationally but especially emotionally," which in his eyes made "people unable to love each other."²⁴³ There is no evidence that the song was inspired by drugs, though its focus on people's inability to communicate relates strongly to the notion of intersubjectivity, which drug culture icons like Ken Kesey considered a principal facet of psychedelic experience.²⁴⁴ Like "Mr. Tambourine Man," "The Sound of Silence" was conceived as an acoustic folk song by its author, but subsequently imbued with a novel sound and popular appeal. The essence of this novel sound in "The Sound of Silence" is the slap-back echo that Columbia engineer Roy Halee put on the track's overdubbed instruments hoping to imitate the sound of hits by the Byrds.²⁴⁵ Ironically, Simon claims to have written the song while sitting in the dark inside his bathroom, an acoustic space he enjoyed for the echo of the tiles.²⁴⁶ Halee's final product ultimately bore little resemblance to the sound of the Byrds. Instead, the tone quality of the two overdubbed electric guitars was almost completely washed out by the heavy sound effects

²⁴² Paul Simon and Art Garfunkel, *Sounds of Silence* (New York, NY: Columbia CS 9269, LP, 1966).

²⁴³ Marc Eliot, *Paul Simon: A Life* (Hoboken, NJ: Wiley, 2010), 40.

²⁴⁴ Wolfe, *The Electric Kool-Aid Acid Test*, 61.

²⁴⁵ Dave Simons, *Studio Stories: How the Great New York Records Were Made: From Miles to Madonna, Sinatra to the Ramones*, 1st ed. (San Francisco, CA: Backbeat Books, 2004), 96.

²⁴⁶ Eliot, *Paul Simon: A Life*, 40.

he applied to them, which was a novel sound unto itself.²⁴⁷ Moreover, the freedom and expressivity with which session artists Al Gorgoni and Vinnie Bell played these instruments was very distinct and notable for the time.

The commercial success of “Mr. Tambourine Man” and “The Sound of Silence” invites speculation as to why these tracks resonated with the American audience. It suggests that Americans desired—or at least were willing to entertain—new sounds from their radios and record players. Equally inviting and potentially specious is speculation concerning the cultural reception of the lyrics of these songs. On a *Billboard* chart dominated by songs about unrequited, blossoming, and failed romance, it is curious that these two songs found success. Undoubtedly, there were many who did not pay attention to the lyrics and simply enjoyed these songs for their distinctive sounds. Both of these songs, however, are chronologically correlated with a major watershed in American culture that saw remnants of the Fifties give way to new ideas and cultural movements that were born of the Sixties—including popular drug culture. Indeed, the success of these songs invites speculation concerning how they may have reflected—or even influenced—the changes that were taking place.

²⁴⁷ To my knowledge, the closest precedents for this sound are some of Del Shannon’s hits from the mid-Sixties, such as “Keep Searchin’ (We’ll Follow the Sun)” (1964) and “Rag Doll” (1965).

Novelty Songs (1965)

While folk rock infused the American charts with surreal sounds and texts, the first songs to explicitly discuss the use of psychedelic drugs were novelty records that approached the topic with a sense of humor. Sometime in 1965, an artist from Los Angeles named Kim Fowley released a single that featured a song called “The Trip” on its A-side. While drugs are not mentioned by name in the song, its title and lyrics leave little room for alternative interpretations:

Summertime is here kiddies, and it's time to take a trip
This world's so bad, you feel so sad
You gotta take a trip, into a world so glad
A world of frogs, and green fountains
And flying dogs, and silver cats
And emerald rats, and purple clouds
And faceless crowds, and walls of glass that never pass
[...]
Just close your eyes
It's groovy now
Because I'm swimming in beauty
[...]
No one will know what goes on
Just you and me and the dreams we see.²⁴⁸

Furthermore, in an advert placed in the *Los Angeles Free Press* beginning October 29, 1965, Fowley describes the single as having a “psychedelic sound.” This advert also evidences the limited circulation of this record. The small text-only notice invites readers to send a dollar to Fowley's address in Hollywood to receive the single, and states that

²⁴⁸ Transcription from *Nuggets: Original Artyfacts from the First Psychedelic Era, 1965-1968*, (Rhino R2-75466, 1998). I was unable to obtain a copy of the original single.

the record was banned by radio stations and refused by record stores.²⁴⁹ This claim is believable, as information on this record is so sparse that it is often missing from discographies chronicling Fowley's work.²⁵⁰ The lyrics of this song are awkwardly set to a slow monotonous groove repeated by an electric guitar, bass, keyboard, and drum kit. Perhaps the most notable and anticipatory feature of the track is the prominence of the tambourine, which sounds as though it was treated with an echo effect and added later to the multi-track mix in order to preserve the quality of its sound. Indeed, future psychedelic acts like Country Joe and the Fish would embrace the unique timbre of this instrument in a similar manner.²⁵¹ By the fall of 1965, a Los Angeles disc jockey who went by the name "GODFREY" had released his own cover of "The Trip."²⁵² This cover employed different lyrics and instrumentation but explored the same theme over the essential monotonous groove of the original. It did not feature Fowley's distinctive tambourine but is among the first psychedelic songs to prominently feature the rock organ. By the early Sixties, the organ had slowly made its way from jazz music into several rock n' roll hits, including "Green Onions" (1962) by Booker T. & the MGs and "Louie, Louie" (1963) by the Kingsmen. Ultimately, GODFREY's version of the "The Trip" met a similar fate to Fowley's original, and did not receive much attention.

On the other side of the country, a New York City band called the Fugs was breaking similar ground. The band had initially been formed by three poets in the

²⁴⁹ "The Record Stores Won't Sell..." *The Los Angeles Free Press*, October 29, 1965, 2.

²⁵⁰ For example, it is absent from the otherwise comprehensive discography in Martin Strong's *Great Indie Discography* (2003).

²⁵¹ Country Joe and the Fish's song "Section 43" is a good example of this usage.

²⁵² "Spotlights--Predicted to Reach the Hot 100 Chart," *Billboard*, October 23, 1965, 16.

summer of 1963, and later joined by Steve Weber and Peter Stampfel of the Holy Modal Rounders—the band that had loosely used the term “psychedelic” in their cover of “Hesitation Blues.”²⁵³ The group was a satirical rock band with a penchant for taboo topics, such as drugs, sex, and counterculture politics. In April of 1965, Harry Smith—producer of the notable *Anthology of American Folk Music*—helped the Fugs record 23 of their songs. Ten of these songs were selected to comprise the band’s first album *The Village Fugs—Ballads and Songs of Contemporary Protest, Points of View and General Dissatisfaction*, which was released in the fall of 1965.²⁵⁴ One of the songs on this album was entitled “I Couldn’t Get High” and chronicled the plight of an individual who struggled to place himself in an altered state of consciousness:

So threw down the bottle and I whipped out my pipe
and I stuffed it full of grass and I gave myself a light
I huffed, I puffed, I smoked and I toked
but after awhile, my heart was nearly broke
Cause I couldn't get high
[...]
So I threw down my pipe as mad as I could be, and I gobbled up a cube of
LSD
I waited thirty minutes for my body to sing
I waited and I waited but I couldn't get a thing
Cause I couldn't get high.²⁵⁵

The music of the song was not overly innovative, but contained several traits that would come to be common features in later psychedelic music, specifically the use of a minor

²⁵³ Richie Unterberger, *Turn! Turn! Turn!: The '60s Folk rock Revolution* (Berkeley, CA: Backbeat Books, 2002), 122.

²⁵⁴ Tony Fletcher, *All Hopped up and Ready to Go: Music from the Streets of New York, 1927-77*, 1st ed. (New York, NY: W.W. Norton, 2009), 245.

²⁵⁵ The Village Fugs, *The Village Fugs--Ballads of Contemporary Protest, Points of View, and General Dissatisfaction* (New York, NY: Broadside BR304, LP, 1965).

key, an active “groovy” bass line, and a prominent “twangy” rhythm guitar.²⁵⁶ *The Village Fugs* failed to climb the charts, but was probably better known than either version of “The Trip” judging by the popularity of the artists involved in its creation and the quantity of references that are made to the album. Furthermore, *The Village Fugs* was successful enough to be re-released on the ESP-Disk label under the name *The Fugs First Album* in 1966.²⁵⁷

While the popularity of “The Trip” and “Can’t Get High” pale in comparison to earlier folk rock hits like “Mr. Tambourine Man” and “The Sound of Silence,” these novelty songs seem to be the first to explicitly discuss the *use* of psychedelic drugs. Musically, they seem to be searching for an idiom to capture this experience but suffer from a lack of creativity in their efforts. Still, the two versions of “The Trip” and “Couldn’t Get High” anticipated several features of the psychedelic sound. A good illustration of the prescient nature of these songs is the 1967 hit “Incense and Peppermints” by the Strawberry Alarm Clock. In this song, the various ingredients employed on these novelty records—the sonority of the minor mode, drone of rock organ, florid bass line, and prominent echo-washed tambourine—are all present and used to create a sound that is very distinct from previous subgenres of rock n’ roll.

²⁵⁶ Notably, the instrumental parts of this track sounds a lot like the song “Reno Nevada,” which was released in April of 1965 by the Fugs’s fellow New York folk artists Richard and Mimi Farina (*Celebrations for a Grey Day*, Vanguard VRS-9174, 1965).

²⁵⁷ The Fugs, *The Fugs First Album* (New York, NY: ESP-Disk 1018, LP, 1966).

Emergence of Local Psychedelic Music Scenes in San Francisco and Virginia City, Nevada

In 1965 two important psychedelic scenes emerged in the western United States. The first was in Virginia City, Nevada, a small town approximate 250 miles from San Francisco. The second, an offshoot of the first, emerged in San Francisco itself. Both of these scenes were the result of local, grassroots cultural movements but were important incubators of psychedelic music that would go on to receive national attention.

San Francisco's Music Scene in the Early Sixties

Despite being a culturally rich city, San Francisco did not have much of a popular music industry prior to the Sixties.²⁵⁸ One of the first events to change this was the arrival of disc jockeys Tom “Big Daddy” Donahue and Bobby “Mighty Mitch” Mitchell at Radio Station KYA in 1961. The two men came to the Bay Area to flee the payola scandals that had rocked the East Coast, and infused KYA’s traditional Top 40 playlist with gritty R&B hits and their own flashy and irreverent broadcast styles.²⁵⁹ By 1963, the pair was organizing and promoting rock concerts in the Bay Area. A year later, they started their own record label called Autumn Records in the garment district of San Francisco.²⁶⁰ Autumn had a few hits, the most famous of which was “C’mon and Swim” by Bobby Freeman. This song drew on the sound of the live music being played at the

²⁵⁸ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 14.

²⁵⁹ Ibid., 16.

²⁶⁰ Ibid., 17.

many topless clubs in San Francisco's North Beach neighborhood, and was also notable for being produced by Sylvester Stewart, a man who would eventually have a successful music career of his own under the name Sly Stone.²⁶¹

On May 14, 1965, Tom Donahue and Bobby Mitchell brought the Rolling Stones and the Byrds to the Civic Auditorium in San Francisco. The concert was poorly attended, but was a memorable turning point for many of the aspiring rock artists who would soon form a grassroots music scene in the city.²⁶²

The Charlatans (June 1965)

*"You talk to anybody from any of the San Francisco rock bands and they will tell you that the Charlatans were the very beginning."*²⁶³

– Peter Albin

Among those to attend the Rolling Stones concert was a young man from southern California named George Hunter. Hunter had been a devoted follower of the Beat scene on Venice Beach in Los Angeles as a teenager in the Fifties. During this time, he also familiarized himself with the experimental music of John Cage and developed an interest in electronic music, prepared instruments, and the concept of a musical

²⁶¹ Jeff Kaliss, *I Want to Take You Higher: The Life and Times of Sly & the Family Stone* (New York, NY: Backbeat Books, 2008), 23.

²⁶² Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 19.

²⁶³ Morrison, "Psychedelic Music in San Francisco: Style, Context, and Evolution", 171.

“happening.”²⁶⁴ After high school, Hunter followed a girlfriend to San Francisco where he studied design and architecture at San Francisco State University. During his studies, he became involved with a group of dancers at his school and worked to create performances involving throat microphones, tape music, and various lighting effects.²⁶⁵ By the fall of 1964, Hunter’s ambitions had shifted to forming his own pop music group. He built a band consisting of Mike Wilhelm, an old friend from high school who played guitar; Richard Olsen, a San Francisco State University music major from Chicago who played bass; and an acquaintance named Sam Linde who played drums. While visiting an unemployment office, Hunter met a stranger named Mike Ferguson who was interested in playing piano for the new band. Ferguson was an eccentric character from San Diego who had a fetish for motorcycles, knives, guns, and vintage clothing. He lived in a commune, was well connected with the underground arts scene in San Francisco, and—according to some sources—earned money by selling marijuana.²⁶⁶ Hunter and Ferguson decided that the new band would imagine and portray themselves as a group of musicians from the Wild West. Concerning the evolution of this idea, Hunter recalls:

A style emerged, a musical and visual concept. It had to do with simply seeing what style was already there and picking all the good pieces of it, bringing them together. It was the blues guitar of Wilhelm, baby-faced Olsen, the kid from Chicago; an old time piano player who looked like he’d just stepped out of a saloon. Together it had a certain connotation. It was set against what was going on in society at the time, with everyone getting tired of a plastic world. It seemed like a good assemblage and people were ready for it.²⁶⁷

²⁶⁴ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 24.

²⁶⁵ Ibid.

²⁶⁶ Ibid., 27, Mary Works, “Rockin’ at the Red Dog: The Dawn of Psychedelic Rock,” (Monterey Video / Sunset Home Entertainment, 2005).

²⁶⁷ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 28.

Indeed, members of the band began to wear vintage suits, accessories, and facial hair, carrying themselves around San Francisco's streets as though they were gentlemen from the Wild West. The band embraced their vintage image as a way of separating themselves from a modern "plastic" world, but also as a means of distinguishing themselves as a band that was American and distinct from the influence of the British Invasion.

Describing this desire Hunter later remarked:

We wanted the identity of an American band, rather than emulating the British sound, that's why we started drifting towards Americana and rootsier music as well, things that would not be identified with anything else.²⁶⁸

The group originally called themselves "George and the Mainliners," a title inspired by Hunter's love of drug-addled novels by William S. Burroughs. At first, Hunter wanted to incorporate techniques from electronic music into the group's sound, feeding all of the instruments into a sound board and modifying them with bell gates and ring modulators.²⁶⁹ The logistics of this idea proved too difficult, and the band found itself playing R&B hits by artists like Chuck Berry, John Hammond, and Muddy Waters. In December of 1964, the band replaced drummer Sam Linde with Dan Hicks after the former proved to be lacking in skill.²⁷⁰ In the early months of 1965 the band changed their name to the Charlatans. They also revamped their musical style and set list. Instead of playing R&B standards, the band began to play folk rock interpretations of songs like

²⁶⁸ The Charlatans, *The Amazing Charlatans* (New York, NY: Big Beat Records CDWIKD-138, CD, 1996). Liner notes p. 11.

²⁶⁹ Ibid. Liner notes p. 11.

²⁷⁰ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 28.

“Wabash Cannonball” and “I’m Alabama Bound,” a song by Robert Hoffman that was popularized by Lead Belly in the Forties.

Though the Charlatans formed in San Francisco, the band’s success and much of the culture that came to define the Bay Area’s psychedelic music scene was conceived over 200 miles away in Virginia City, Nevada. Virginia City was a mining boomtown that emerged after the discovery of the Comstock Lode in 1859, a rich deposit of gold and silver. Mining operations in the town slowed in the 1880s, and by the Sixties the town was using its gold rush history as a means of attracting tourists.²⁷¹ In June of 1965, a young man named Mark Unobsky opened an establishment called the Red Dog Saloon with the help of several of his friends. Chief among the many friends who helped Unobsky was Chandler Laughlin, who was recruited for his experience running the kinds of folk music coffee shops frequented by Beats.²⁷² The venue was an elaborate project that sought to recreate a saloon from the Wild West. Moreover, from its conception, it was envisioned as a meeting place for people who enjoyed drugs.²⁷³ Sometime in the early Sixties, Chan Laughlin and some of his friends had been introduced to the psychedelic drug peyote by members of the Native American community. On Easter of 1963, Laughlin and others brought around 50 people—many of whom would become part of the community that met at the Red Dog Saloon—to Nevada for a night long peyote ceremony with the Native American Church.²⁷⁴ By 1965, Unobsky, Laughlin, and

²⁷¹ David Alan Johnson, *Founding the Far West: California, Oregon, and Nevada, 1840-1890* (Berkeley, CA: University of California Press, 1992), 75.

²⁷² Chandler Laughlin would later become known as Travus T. Hipp when he worked as an alternative new anchor for a handful of radio stations in northern California.

²⁷³ Works, “Rockin’ at the Red Dog: The Dawn of Psychedelic Rock.”

²⁷⁴ Ibid.

their circle of acquaintances were frequently using both LSD and marijuana, and desired an establishment in which they could enjoy these substances. The Red Dog's location in the small town of Virginia City was perfect. The desolate hills east of Sacramento were a place of freedom and lawlessness for young people living in Northern California and were considered a safe place to use drugs.²⁷⁵

Prior to the opening of the Red Dog Saloon, Chan Laughlin would make trips to San Francisco to recruit employees, gather antiques for the saloon's period décor, and purchase large quantities of marijuana to take back to Virginia City. During one of these trips, Laughlin met the Charlatan's manager Phil Hammond, who recommended the band for the Red Dog venue. That night, Laughlin met George Hunter and Mike Wilhelm in North Beach. After hearing a demo tape, Mark Unobsky brought the band to Virginia City for an audition, which they played under the influence of LSD at his request.²⁷⁶ Unobsky thought the band, its Victorian shtick, and the sounds of its music was perfect for the Red Dog and hired them to be the venue's house band. The saloon opened its doors on June 21, 1965 with a performance by the Charlatans. The event was advertised with a poster drawn by George Hunter and Mike Ferguson, which featured highly ornate sketch work. This poster is commonly called "the seed" for its role in inspiring the psychedelic poster art that subsequently flourished and became commonplace in the marketing of any major psychedelic event in the Bay Area.²⁷⁷

²⁷⁵ Ibid.

²⁷⁶ Ibid.

²⁷⁷ Ted Owen, *High Art: A History of the Psychedelic Poster* (London, UK: Sanctuary Publishing, 1999), 34.

The Red Dog Saloon quickly became an important scene, and many young people made pilgrimages from San Francisco to experience what the venue had to offer. The “Red Dog Experience” as some came to call it, was one in which marijuana and more powerful psychedelics like LSD were openly enjoyed in a multi-media environment. The Charlatans played innovative music accompanied by one of the first kinetic light machines to be featured at a concert. Built by Bill Ham, a designer who would go on to engineer some of the most famous light shows in San Francisco, the Red Dog’s machine reportedly cast various patterns of colored light based on the sounds being played by the band.²⁷⁸ There was also an odd gun culture that evolved out of the venue’s historical fantasy, and the general affinity for firearms held by collaborators such as Mike Ferguson and Mark Unobsky. There are even a handful of stories about guns being fired playfully inside the saloon.²⁷⁹

Shortly after Labor Day of 1965, the fun that had started over the summer came to an abrupt halt when Laughlin and the Charlatan’s guitarist Michael Wilhelm were arrested for possessing a pound of marijuana while making a routine supply run between San Francisco and the Red Dog.²⁸⁰ The Charlatans left Virginia City shortly thereafter.²⁸¹ The Red Dog Saloon lasted for two more seasons and featured music from other emerging San Francisco acts, including Big Brother and the Holding Company in 1966.²⁸²

²⁷⁸ Works, “Rockin’ at the Red Dog: The Dawn of Psychedelic Rock.”

²⁷⁹ Ibid.

²⁸⁰ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 36.

²⁸¹ Ibid.

²⁸² Works, “Rockin’ at the Red Dog: The Dawn of Psychedelic Rock.”

The Charlatan's tenure at the Red Dog Saloon proved to be the high point of their career. The band failed to secure a relationship with a record label. Following their failed demo with Autumn Records in August of 1965, the band secured a contract with Kama Sutra Records and sat for some sessions with producer Erik Jacobsen in the early months of 1966. Jacobsen was ultimately dissatisfied. The only material to be released from these sessions in the Sixties was a single of the Coaster's 1958 song "The Shadow Knows" with Robert Johnson's "32-20" on the B-side, which Kama Sutra licensed to Kapp Records.²⁸³ The band continued to struggle in the latter half of the Sixties. Mike Ferguson left the group in 1967, followed by Dan Hicks, and finally George Hunter. It was not until 1969 that the remaining members of the original band, Richard Olsen and Mike Wilhelm, and two new members, Terry Wilson and Darrell DeVore, managed to release a full album of music entitled *The Charlatans*.²⁸⁴ The band broke up shortly thereafter.²⁸⁵

The Charlatans' troubled history in the studio complicates speculation about how the band sounded when performing at the Red Dog Saloon. George Hunter described their sound as follows:

It was 1920s country-folk music with something done to it. That something owed a great deal more to the haunting, honky-tonk roots of the material, than the prevailing pop ethic of the moment. It was, in some puzzling but undeniable way, authentic.²⁸⁶

²⁸³ The Charlatans, *The Shadow Knows / 32-20* (New York, NY: Kapp Records K-779, Single, 1966).

²⁸⁴ ———, *The Charlatans* (New York, NY: Philips PHS 600-309, LP, 1969).

²⁸⁵ ———, *The Amazing Charlatans*. Liner notes pp. 9-10.

²⁸⁶ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 28.

Darby Slick of the Great Society wrote of his experience seeing the Charlatans at the Red

Dog:

George played autoharp on some songs, and that, with the other instruments, gave them a shimmering zingy *high* quality. On other songs, George played tambourine, and he used to wear a knee pad pulled up high on the thigh under his pants, to protect himself from the tambourine; nonetheless, I think he managed to beat himself up pretty good with it in the course of the evening. Dan Hick played the drums with them, and his style, simple and direct but with almost Spike Jones overtones, perfectly suited their mood.²⁸⁷

Some accounts suggest that the Charlatans music had an unpolished quality to it.

Describing the group's dynamic, Richard Olsen remarked:

We all felt we were as equally important as each other, and it was because we were so individual that we were inconsistent. We'd come together when it suited us, like five gunfighters coming to town, hired to do some job. That was the concept.

[...]

There was always a lot of resistance in the group to formal rehearsal, so as a result of that our concepts of the music didn't always work, and there'd be shoddy performances.²⁸⁸

Indeed, Olsen's comments may shed some light on the band's failure to secure a relationship with a record label. Of the handful recordings that survive of the original quintet, it is difficult to know which is most indicative of the band's performances at the Red Dog. The band's demos for Autumn Records were recorded at the height of their popularity, though none of the surviving band members were reportedly happy about the material being made public in 1996.²⁸⁹ The four songs recorded in the Autumn session

²⁸⁷ Darby Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound* (Berkeley, CA: SLG Books, 1991), 54. Emphasis added.

²⁸⁸ The Charlatans, *The Amazing Charlatans*.

²⁸⁹ Ibid. Liner notes p. 22

included two original songs by Mike Wilhelm, “Number One” and “Blues Ain’t Nothin’,” both of which were well-rounded pop songs that rely heavily on established folk, rock, and blues traditions; “Baby Won’t You Tell Me” by John Hammond; and “Jack of Diamonds,” a traditional tune also known as “The Cuckoo” that featured some interesting rhythmic interplay between Ferguson’s piano and Hunter’s autoharp. All things considered, there is nothing too novel about these tracks, which admittedly were demos and did not benefit from the enhancements of a full production process. Moreover, the band is said to have had some creative conflicts with Donahue and the Autumn studio staff, which suggests that they did not have full control over the session’s content.²⁹⁰ Still, the aesthetic of the Autumn tracks are in no way surreal and have little to nothing in common with the “psychedelic” sound.

Most of the tracks from the band’s subsequent session with Kama Sutra records, which occurred sometime in the early months of 1966, are similar in nature. The notable exception to this statement is the band’s cover of Buffy St. Marie’s 1964 folk song “Cod’ine.” The Charlatans’ version of the song, “Codeine Blues,” was the track the band wanted on the A-side of their single, but Kama Sutra had concerns about releasing a song about drugs and instead featured “The Shadow Knows” on the single.²⁹¹ The recording of “Codeine Blues” is notable for two distinctive sounds on the track: an autoharp strumming with a distinctive tremolo sound effect, and a lead guitar washed out by a heavy echo effect, which is buried deep in the mix. The guitar, played by Mike Wilhelm,

²⁹⁰ Ibid. Liner notes p. 16.

²⁹¹ Ibid. Liner notes p. 22; The Charlatans, *The Shadow Knows* / 32-20, (New York, NY: Kapp Records K-779, Single, 1966).

delivers a virtuosic solo that is forward-looking both in its style and ability to capitalize on the dynamic responses of the sound effects equipment being used. In contrast to the other recordings, the sound of this track does bear a certain surreal quality, though it is difficult to know if the aforementioned features were pioneered by the Charlatans or added by Kama Sutra during the production process.

The studio recordings ultimately *suggest* that the music played by the Charlatans at the Red Dog Saloon was not overly innovative or central to the evolution of the psychedelic sound. Moreover, by the time the Charlatans recorded “Codeine Blues” they had played several concerts with other innovators in the San Francisco scene, which may have pulled the style of their music in a new direction. When discussing the Red Dog Saloon, the people who were involved with it tend to talk more about the culture that persevered at the venue than the music it featured. Indeed, The Charlatans former manager, Phil Hammond, once said about the band he managed:

It wasn't just the music, though the music is certainly very important, but they [the Charlatans] radiated a sense of style and a lifestyle that infected everybody else that came to see them. In that sense they really were one of the great progenitors of all the great bands that came out of San Francisco.²⁹²

Luria Castell, a founding member of the Family Dog commune, remembers George Hunter in particular as an influential figure. Specifically, she remembers him as the first hippie in the Bay Area, and someone who presented an alternative to the prevailing Beat subculture in San Francisco.²⁹³ Hunter seems to have had a charisma that was

²⁹² Works, “Rockin’ at the Red Dog: The Dawn of Psychedelic Rock.” Liner notes pp. 3,16.

²⁹³ Ibid.

uncharacteristic of the downtrodden Beats. Indeed, photographer Herb Greene once described him as having an “outrageous fey attitude.”²⁹⁴ Whatever defined the charisma of Hunter and the Charlatans ultimately inspired Luria Castell and her commune to organize concerts based on the “Red Dog Experience” back in San Francisco.

The Family Dog Concerts (October 1965)

As the Charlatans were leaving Nevada, the music scene back in San Francisco was evolving. On September 13, a singer-songwriter named Marty Balin opened a small folk music club on Fillmore Street called The Matrix.²⁹⁵ Also around this time, Tom “Big Daddy” Donahue opened a venue called Mother’s on Broadway Street, which is considered to be the first psychedelic nightclub.²⁹⁶ Donahue created a womb-like environment with three-dimensional murals, special lighting effects, and lava lamps built into the walls, hoping to cash in on the new drug culture that was beginning to form. Apart from a well-attended performance by the Lovin’ Spoonful, however, the venue failed to succeed and did not last the fall season.²⁹⁷

Ironically, the people who had the most success capitalizing on the cultural developments taking place in San Francisco were four young adults who at some point

²⁹⁴ The Charlatans, *The Amazing Charlatans*.

²⁹⁵ Jeff Tamarkin, *Got a Revolution: The Turbulent Flight of Jefferson Airplane* (New York, NY: Atria Books, 2003), 39.

²⁹⁶ Joel Selvin, *San Francisco, the Musical History Tour: A Guide to over 200 of the Bay Area's Most Memorable Music Sites* (San Francisco, CA: Chronicle Books, 1996), 23.

²⁹⁷ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 43.

became collectively known as the Family Dog.²⁹⁸ They lived in a communal pad on Pine Street and had little to no experience organizing and promoting live music, but rather enjoyed junking at thrift shops and listening to rock records.²⁹⁹ These individuals were Jack Towle, a purported marijuana dealer from New England; Alton Kelley, a poster artist from Connecticut; Ellen Harmon, Kelley's girlfriend from Detroit who had a passion for comic books and Americana; and a San Francisco State University political science major named Luria Castell who was raised in the Bay Area.³⁰⁰

Castell, Kelley, and presumably other members of the commune had spent time at the Red Dog Saloon over the summer and witnessed the Charlatans perform there.³⁰¹ The experience seems to have been pivotal for Castell and Kelley, the latter having stated in an interview that the Family Dog concerts would not have happened had it not been for the inspirational role of the Red Dog Saloon.³⁰² To this end, upon returning to San Francisco, members of the Family Dog were disappointed that there was no similar venue in the Bay Area for psychedelic drug users to congregate. Moreover, Luria in particular longed for someplace where people could dance to rock music.³⁰³ The Family Dog

²⁹⁸ The name Family Dog comes from Ellen Harmon's dog that was run over in an accident (See Ralph Gleason's from 10/22/1965)

²⁹⁹ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 45.

³⁰⁰ Barry Miles, *Hippie* (New York, NY: Sterling, 2004), 44; "Alton Kelley," <http://www.familydog.com/artist/alton-kelly>, Accessed November 21, 2014.; Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 45; Ralph Gleason, "the Family Dog' -- Liverpool in S. F.," *San Francisco Chronicle*, October 22 1965, 51.

³⁰¹ In the documentary *Rockin' at the Red Dog* Ellen Harmon states that she was a dishwasher at the Red Dog Saloon the *second* summer it was open during the time that Big Brother and the Holding Company (1966). Though this account is anachronistically placed in a sequence of stories concerning the events of 1965. Hence it is unclear if she was there the summer of 1965. Little information exists on Jack Towle's involvement with the Red Dog.

³⁰² Works, "Rockin' at the Red Dog: The Dawn of Psychedelic Rock."

³⁰³ Ibid. Gleason, "the Family Dog' -- Liverpool in S. F.," 51.

decided to take matters into their own hands and pooled their money together to produce their own event. They believed that San Francisco was rich in musical talent and that the city's size and culture was ideal for it to become "the American Liverpool."³⁰⁴ Alton Kelley designed posters, Ellen Harmon staffed the phone, Jack Towle managed the finances, and Luria Castell drummed up support in the local community.³⁰⁵ By most accounts, Castell was the driving force behind the Family Dog's activities. In previous years, she had been a House Un-American Activities Committee protester, a Fair Play for Cuba committee member, and an organizer for the W.E.B. Du Bois club. Her tenure as a left-wing political activist seems to have given her the experience necessary to be an effective advocate and organizer for large events.³⁰⁶ Indeed, Ralph J. Gleason, a jazz critic for the *San Francisco Chronicle*, was struck by Castell's passionate advocacy for dance events during his first meeting with the Family Dog. In one of his books, he quotes her to have pleaded:

They've got to give people a place to dance. That's what's wrong with those Cow Palace shows. The kids can't dance there. There'll be no trouble when they can dance.³⁰⁷

Gleason agreed to lend his support to the venture and promoted it in his column.³⁰⁸ The Family Dog initially struggled to find a venue, but eventually managed to book Longshoremen's Hall, a newly built auditorium on the edge of Fisherman's Wharf in San

³⁰⁴ Gleason, "the Family Dog' -- Liverpool in S. F.," 51.

³⁰⁵ Dennis McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 1st ed. (New York, NY: Broadway Books, 2002), 94.

³⁰⁶ Ibid.

³⁰⁷ Gleason, "the Family Dog' -- Liverpool in S. F.," 51. The Cow Palace shows were a series of events produced by Tom "Big Daddy" Donahue.

³⁰⁸ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 47.

Francisco. Their first event entitled “A Tribute to Dr. Strange” was held on October 16, 1965, and was the first of several event titles that seem to have stemmed from Harmon’s love of comic books.³⁰⁹ It was billed as a “dance concert” and featured the Charlatans, Jefferson Airplane, the Marbles, and the Great Society. The show was hosted by Russ “The Moose” Syracuse, the midnight to 6:00 am DJ at local radio station KYA whose quirky humor was very popular among young people in the Bay Area. This first event drew approximately four to five hundred attendees and was reportedly one of the first times that various pockets of San Francisco’s counterculture scene were able to openly mingle.³¹⁰ Ralph Gleason described the event in his column in the *San Francisco Chronicle*:

...a hippy happening at the Longshore Hall which was delightful and signified the linkage of the political and social hip movements. SNCC [Student Nonviolent Coordinating Committee] buttons and peace buttons abounded, stuck onto costumes right out of the Museum of Natural History [...] The bar did no business and the coke machine ran out [...] Long lines of dancers snaked through the crowd for hours holding hands. Free form improvisation (“self-expression”) was everywhere.³¹¹

In contrast to most music events in San Francisco, attendees embellished their fun with marijuana and not alcohol. Chet Helms, a Texan who would eventually assume leadership of the Family Dog, remembered the experience of enjoying the drug openly in such a large group:

[It was an] exhilarating sense of safety, sanctuary. The feeling was “well they can’t bust us all.” There was freedom and a moment of pure recognition. These were my people, my peers, all of a sudden together.”³¹²

³⁰⁹ Ibid., 46.

³¹⁰ Works, “Rockin’ at the Red Dog: The Dawn of Psychedelic Rock.”

³¹¹ Ralph Gleason, “Wild Weekend around the Bay,” *San Francisco Chronicle*, October 18 1965, 51.

³¹² Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 48.

Castell felt that the event had broad cultural implications for the scene in San Francisco:

Not only did we want to have a good time, we felt a potential, a positive change in the human condition...almost a religious kind of thing, but not dogma, unlocking that tension and letting it come out in a positive way with the simple health of dancing and getting crazy once a month or so.³¹³

Whatever its significance, it is clear that the Family Dog's "A Tribute to Dr. Strange" event started something. It coalesced various elements of San Francisco's counterculture and established a prototype for future events in the Bay Area. It also transplanted the spirit of the Red Dog Saloon to the city. As previously mentioned, Luria Castell had been inspired by the new "hippy" charisma embodied by George Hunter and the "Red Dog Experience." While she never detailed the exact nature of this charisma, it is clear that the culture that persevered at the Red Dog Saloon and "A Tribute to Dr. Strange" was far more playful and imaginative than the Beat subculture that had been the dominant subversive force in San Francisco prior to the mid-Sixties. As discussed in the previous chapter, the Beat lifestyle focused on the virtues and experiences of a "beaten down" urban underclass. While they embraced escapism, these sentiments were generally imbued with notions of an inherent human struggle for self-realization and were very *real* in this sense. There was nothing "fey" about the Beats—to borrow Herb Greene's descriptor of George Hunter. Members of the emerging subculture—whom some called hippies—enjoyed the playfulness of freeform dancing and the fiction of wearing costumes. Darby Slick recalls when the Charlatan's penchant for dress up spread to the entire Bay area:

³¹³ McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 94.

We stopped being students, and became pirates, or renaissance jugglers, or almost anything. Cowboy, not drugstore-shiny but nineteenth century black, was popular, as was anything that looked authentically Native American. The clothes of all foreign countries were fair game. It felt so liberating, but, above all, it was fun. Why should people in movies get to wear all the good clothes?³¹⁴

Even the comic book themes of the Family Dog events evidenced a shift towards imagination and fiction.

In all, the Family Dog would host three dance concerts at Longshoremen Hall in the fall of 1965, including “A Tribute to Sparkle Plenty” held on October 24, and “A Tribute to Ming the Merciless” held on November 6. Both subsequent events featured the Charlatans and a handful of other bands, including the Lovin’ Spoonful, who performed at the “Sparkle Plenty” event, and a colorful band from Los Angeles called the Mothers who performed at the “Ming the Merciless” tribute.”³¹⁵ The Family Dog concerts also evolved to include Bill Ham’s light shows, which cast molten images of colored oil on the walls and ceilings using an overhead projector.³¹⁶ Two of the bands that played at the Family Dog events would prove very important to the history of psychedelic music: the Great Society and the Jefferson Airplane.

³¹⁴ Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound*, 50.

³¹⁵ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 53. Sculatti describes the Mothers as being colorful “Day-glo Dadaists.”

³¹⁶ Ibid.

The Great Society

The Great Society consisted of a young woman named Grace Slick, her husband Jerry Slick, and brother-in-law Darby Slick. Grace was born in Illinois to a father who was an investment banker and a mother who was a singer, but did not perform out of deference to her husband's career. From a young age, Grace was very eccentric and had difficulty making friends. She had taken some piano lessons in her youth, but mostly enjoyed drawing, writing poetry, dressing up, and performing small skits.³¹⁷ As a teenager, Grace lived in the affluent San Francisco suburb of Palo Alto where she attended a finishing school and became an experienced drinker. In September of 1957, she left Palo Alto for a year to attend Finch College in New York City. It was here that she developed a love of folk music and learned some guitar. In 1958, she transferred to the University of Miami where she smoked marijuana for the first time. By 1959, she had dropped out of college and returned to Palo Alto where she worked as a model before marrying her husband Jerry.³¹⁸ After a brief stint in San Diego, the couple returned to San Francisco and lived a bohemian lifestyle while Jerry attended film school at San Francisco State University. Throughout the early Sixties, Grace, her husband Jerry, and brother-in-law Darby smoked marijuana together and experimented with peyote, Benzedrine, psilocybin mushrooms, and eventually LSD.³¹⁹ Grace and Darby would often play music together for several hours under the influence of alcohol and marijuana,

³¹⁷ Tamarkin, *Got a Revolution: The Turbulent Flight of Jefferson Airplane*, 98.

³¹⁸ *Ibid.*, 101.

³¹⁹ Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound*, 24, 32, 42.

usually with him on acoustic guitar and her on the recorder. According to Darby, the two never played actual songs, but enjoyed freeform jam sessions involving improvisation that seldom followed any musical conventions.³²⁰ By early 1965, Grace, Jerry, and Darby began to play together as a band. In his autobiography, Darby recalls how Jerry, Grace, and he were among the many amateur musicians who heard the Beatles and thought “if they can do it, I can do it.”³²¹ In the beginning, Jerry played drums, Darby played electric guitar, and Grace sang with Jean Piersol, the wife of one of Jerry’s friends from film school. Many of the band’s early songs were written by Grace, among them “Father Bruce,” her now-famous tribute to comedian Lenny Bruce.³²² Jean Piersol’s involvement with the band proved to be short-lived as she and her husband soon moved to San Jose. The trio eventually added David Minor and Bard Dupont to their ensemble. David sang, played rhythm guitar, wrote songs, and had good business skills; Bard played bass and harmonica. The new members completed the ensemble, and the band began to rehearse regularly at Jerry and Grace’s house that was north of San Francisco in Larkspur.³²³ The group soon came to call themselves the Great Society after Lyndon Johnson’s ambitious set of social programs. The band collectively despised Johnson and, according to Darby Slick, the name was their way of stating “we hippie freaks, drug addicts, we are your Great Society.”³²⁴

³²⁰ Ibid., 25.

³²¹ Ibid.

³²² Ibid., 41.

³²³ Ibid., 43.

³²⁴ Ibid., 44.

The band's first performance occurred on October 15, 1965 at a small Beat club in North Beach. The band played gigs at most of the major rock venues in San Francisco and recorded sessions with Sly Stone at Autumn Records near the end of 1965. Autumn released a single containing the songs "Somebody to Love" and "Free Advice" through their small subsidiary Northbeach Records.³²⁵

The Great Society made several important contributions to the psychedelic sound during its brief existence. It was among the first rock—not folk—groups to feature a female lead singer. The Great Society was also the epitome of what Craig Morrison terms "naïve improvisation" in his dissertation.³²⁶ Darby, Jerry, and Grace Slick all had very little training in music but were not afraid to improvise and experiment with it. The band also wrote two songs that are among the most famous psychedelic hits of the Sixties: "Somebody to Love" and "White Rabbit."

Darby Slick wrote "Somebody to Love" in the early months of 1966. One evening Darby took some LSD and waited for his live-in girlfriend Leslie to come home. When she did not return, he pieced together various hints and realized that she was spending the night with another lover.³²⁷ At dawn, as he was coming down from his trip, he sat with his guitar and penned the lyrics:

When the truth is found to be lies
And all the joy within you dies

Don't you want somebody to love?
Don't you need somebody to love?

³²⁵ The Great Society, *Somebody to Love / Free Advice* (San Francisco, CA: Northbeach 1001, Single, 1966). Several online record collectors seem to believe this single came out in February of 1966.

³²⁶ Morrison, "Psychedelic Music in San Francisco: Style, Context, and Evolution", 105.

³²⁷ Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound*, 75.

Wouldn't you love somebody to love?
You better find somebody to love.³²⁸

Slick claims that the words and music for the rest of the song quickly followed. He did not have training in music notation nor a tape recorder in his possession, so he sang it repeatedly—through his sobbing—before going to sleep to ensure he had memorized it. The other members of the band thought the song was a hit, and it soon became a standard feature of their set list.³²⁹ It was perfect for Grace, who skillfully infused mournful pain within the long, howling sustained notes of the verses and scornful judgment into the questions of the chorus. The song's minor key and melancholic lyrics are offset by the groovy, energetic rhythms of the bass, percussion, and rhythm guitar lines. The resultant arrangement was a distinctive track that features an odd synergy of emotions—one that was, at once, depressed and upbeat. Between verses, Darby interjected short awkward guitar solos that betray his lack of training but are undeniably expressive. Indeed, Darby was an admirer of the quirky melodies of Ornette Coleman and sought to “play something really weird that had never been played before.”³³⁰ The recorded versions of the song also evidence the fact that the Great Society was not a band that played perfectly in tune.³³¹ Slick has since commented that poor tuning was very common among San Francisco psychedelic bands at that time.³³²

³²⁸ Ibid., 76.

³²⁹ Ibid.

³³⁰ Ibid., 61.

³³¹ The Great Society, *Grace Slick and the Great Society* (New York, NY: Columbia CGK 30459, CD, 1990).

³³² Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound*, 52.

“White Rabbit” was written by Grace Slick and was a product of her love of Lewis Carroll’s *Alice in Wonderland*, Maurice Ravel’s one-movement orchestral piece *Boléro*, and Miles Davis’s 1960 album *Sketches of Spain*. The song opens with the lyrics:

One pill makes you larger
And one pill makes you small
And the ones that mother gives you
Don’t do anything at all.³³³

A recording of a live performance of the song reveals the degree to which the band experimented with it.³³⁴ The song opens with a long improvisational section that consumes 4'23" of the roughly six-minute song. In this section, the underlying harmony oscillates between F-sharp major and G major chords while the electric guitar and an oboe solo in the Phrygian dominant scale. The sound of this opening section is very innovative and more like Eastern-inspired jazz than rock and roll. As Grace begins to sing, the song transitions into the key of A major, though a chromatic mediant on the third scale degree (C major) is thrown in for added color. It is unlikely that any of the band members understood the song’s harmony in these terms. Nevertheless, it is very progressive for its time and evidences the degree to which bands in the Bay Area were beginning to incorporate long drawn-out jam sessions into their songs.³³⁵

³³³ The Great Society, *Grace Slick and the Great Society*.

³³⁴ The location of this recording is not provided in the liner notes of the album. Some individual in online forums seem to believe the performance took place at The Matrix in San Francisco, but I could not verify this.

³³⁵ The Grateful Dead and Big Brother and the Holding Company were among the other bands moving in this direction.

Jefferson Airplane

Jefferson Airplane began as the brainchild of Marty Balin and Paul Kantner. Balin was a skilled vocalist from Richmond, California who started out singing teen pop songs in the early Sixties that were similar to those of Gene Pitney and Paul Anka. By the mid-Sixties, he had transitioned into folk music.³³⁶ Kantner was a San Francisco native who began playing in folk clubs while attending college. He was fond of drugs and was first introduced to LSD in 1964.³³⁷ By 1965, both Balin and Kantner were intrigued by folk rock and upon meeting decided to start their own band. They quickly recruited Bob Harvey (upright bass), Jerry Peloquin (drums), and Signe Toly (lead vocals), into their group. In June 1965, they convinced Jorma Kaukonen to join their group as its lead guitarist. Kaukonen was raised in Washington, D.C., but had lived in Pakistan, Manila, and other foreign countries through his father's work with the U.S. government, and had experienced a diverse array of musical traditions.³³⁸ Kaukonen recalls being seduced into the band by technology, specifically an Echoplex tape delay unit that Ken Kesey had brought to Jorma's audition.³³⁹ Balin also teamed up with three other investors to open a club called the Matrix at 3138 Fillmore Street in August of 1965 with the intention that Jefferson Airplane would serve as its house band.³⁴⁰ Most of the band's early original songs were written by Balin and Kantner, including collaborative efforts such as "Let Me

³³⁶ Tamarkin, *Got a Revolution: The Turbulent Flight of Jefferson Airplane*, 8-9.

³³⁷ *Ibid.*, 16-19.

³³⁸ *Ibid.*, 23-25.

³³⁹ *Ibid.*, 26.

³⁴⁰ *Ibid.*, 24.

In,” “Come up the Years,” and “Runnin’ Round this World.”³⁴¹ These songs featured elements of folk and rock music, but often had sentimental lyrics that were set to smooth and flowing melodies, which betrayed Balin’s background as a teen crooner. The result was music that was far more serious, literal, and emotional than folk rock hits like “Mr. Tambourine Man,” and had very little to do with the psychedelic music that would be released by future incarnations of the band.

In the fall of 1965, Jerry Peloquin was replaced by Alexander “Skip” Spence on drums. Spence was a guitarist but brought an intensity to the drum set that the band liked.³⁴² Soon after, Bill Harvey was replaced by Jack Casady on bass. Casady was a former high school bandmate of Kaukonen’s from Washington D.C. Given that he was not a fan of Sixties rock and roll, Casady was surprised when Kaukonen asked him to come to San Francisco, but nevertheless agreed.³⁴³ In December of 1965, the new lineup began recording for RCA. By March of 1966, they had recorded their first album entitled *The Jefferson Airplane Takes Off*. This LP was only successful in the San Francisco area, and while its songs had merit they were in no way psychedelic and very different from the band’s future music.³⁴⁴

³⁴¹ Ibid., 37.

³⁴² Ibid., 41.

³⁴³ Ibid., 49.

³⁴⁴ Ibid., 82.

The Grateful Dead at Kesey's Acid Tests (November 1965)

By the end of 1965, Ken Kesey and his Merry Pranksters had begun holding their Acid Test events in the Bay Area, which were intended to introduce the general public to LSD.³⁴⁵ The Acid Tests were multimedia events that features, lighting effects, projected movies, and a host of sounds—musical and otherwise—that were produced by the elaborate audio systems the Pranksters liked to construct using a vast array of speakers, microphones, tape recorders, tape delay units, and other effects.³⁴⁶ Moreover, the very first Acid Test on November 27 in Santa Cruz featured a band called the Warlocks, who soon became known as the Grateful Dead.³⁴⁷

The original line-up of the Dead consisted of Jerry Garcia (lead guitar and vocals), Bob Weir (rhythm guitar and vocals), Phil Lesh (bass), Ron “Pigpen” McKernan (keyboards), and Bill Kreutzman (drums)—all of whom grew up in the Bay Area. Garcia came from a musical family and had taken up the electric guitar at age fifteen. He started out playing rock n’ roll songs by ear, but in the early Sixties became interested in folk music, especially bluegrass and country blues artists like Big Bill Broonzy, and took up the banjo.³⁴⁸ Bob Weir was still a teenager when he joined the band. In high school, he enjoyed playing the guitar and had an enduring love for folk artists like the Kingston Trio, Joan Baez, John Herald, and the Carter Family.³⁴⁹ Phil Lesh had a love of classical music that began during his childhood. He took lessons in violin during his youth before

³⁴⁵ These events are discussed in greater detail in the previous chapter.

³⁴⁶ Wolfe, *The Electric Kool-Aid Acid Test*, 234.

³⁴⁷ Ibid.

³⁴⁸ McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 12, 16.

³⁴⁹ Ibid., 65.

taking up the trumpet at age fourteen. Lesh studied music at San Francisco State University in 1957 before transferring to the College of San Mateo a year later. At San Mateo, Lesh participated in the school's award-winning jazz ensembles as a trumpet player, and developed an interest in avant-garde composition that eventually led him to study with Luciano Berio at Mills College in the spring of 1962—along with classmates Steve Reich and John Chowning.³⁵⁰

In December of 1963, Weir and his friends randomly met Garcia on the street, and the two ended up jamming together. In January of 1964, Garcia and Weir formed a group called Mother McCree's Uptown Jug Band along with some of their friends and future Grateful Dead keyboardist Ron McKernan. The group played an eclectic mix of folk, blues, and rock hits. By fall of 1964, McKernan convinced Garcia that they should form a new band to play electric blues. Garcia, Weir, and McKernan began playing under the name the Warlocks along with bassist Dana Morgan, Jr. and drummer Bill Kreutzman.³⁵¹ In May of 1965, Garcia recruited Lesh to play bass with the Warlocks. Garcia and Lesh had met in 1962 through mutual acquaintances at a party in Perry Lane, which led to Garcia performing on KPFA where Lesh volunteered as an engineer.³⁵² Notably, Lesh did not play the bass, but Garcia was confident in his ability to learn and become proficient. Lesh was inspired by the electric bass. He had grown up admiring jazz bassists like Scott La Faro and Charlie Haden, but recognized that the electric bass was a new instrument and subsequently formed his own highly melodic style of playing.³⁵³ In the months that

³⁵⁰ Ibid., 19, 39.

³⁵¹ Ibid., 66, 79.

³⁵² Ibid., 39.

³⁵³ Ibid., 83.

followed, the band would often spend their days roaming around the Bay area on LSD before coming down, smoking marijuana, and playing their gigs at a club called the In Room down in Belmont. Indeed, while the group did not play on LSD, it and other psychedelics had a profound effect on the band in this period. On his experiences with LSD, Garcia stated:

[Acid trips] have that way of being individual...people don't experience exactly the same effects. They experience themselves, and sometimes it turns out to be utterly delightful, sometimes it turns out to be a total bummer, but either way, you've got more of it to work with when you've taken psychedelics and seen the bigger picture, you know? ... after that, for me, in my life, there was no turning back.³⁵⁴

The group developed a strong musical and psychological bond, which Lesh would later describe as the sort of “group mind” described in Gestalt psychology.³⁵⁵ In November of 1965, the band became aware of another group that was using the name the Warlocks, and set out to find a new title. Garcia randomly found an entry for “Grateful Dead” in a dictionary during one of the group’s gatherings. The term had been coined by Francis Child to describe a genre of folk ballad in which a hero resolves a debt for a deceased stranger, allowing the body to be properly buried, and is then assisted in some way by the spirit of the grateful dead person.³⁵⁶

Since the age of fifteen, Garcia had been connected with the North Beach Beat scene, and both he and Lesh ran in the same Perry Lane social circles as Ken Kesey. It is presumably through these associations and their affinity for LSD that the Grateful Dead

³⁵⁴ Ibid., 104.

³⁵⁵ Ibid., 90.

³⁵⁶ Ibid., 100.

came to be the band of choice for the Prankster's Acid Test events. Moreover, the Pranksters liked the spontaneous and free nature of the Grateful Dead's music, which drew upon improvisational practices from jazz, blues, and folk traditions. They also liked that the band did not play in defined sets, and catered to the vibe of their audience in order to play "what was in the air, not on the music sheet."³⁵⁷ Describing the experience of playing the Acid Tests Garcia remarked:

We all preferred the anarchy of the Tests in a lot of ways. Every person was a participant and everywhere was the stage. We didn't have to entertain anybody. We were no more famous than anyone else.³⁵⁸

There was no pressure on us because people didn't come to see the Grateful Dead, they came for the Acid Test; it was the whole event that counted. Therefore we weren't in the spotlight so when we did play, we played with a certain kind of freedom you rarely get as a musician.³⁵⁹

The Dead remained grateful to the Pranksters for germinating a special culture around their band. The Pranksters were a prototype of the communal "Deadhead" culture that followed them on tour for several decades. Reflecting on the Pranksters long after the Sixties were over, Jerry Garcia remarked that the group was the Dead's "first and best audience."³⁶⁰ He further stated:

The Acid Tests were the prototype for our whole basic trip. But nothing has ever come up to the level of the Acid Tests [...] Light shows and rock n' roll came out of it, but the Tests were a million times more incredible.³⁶¹

³⁵⁷ Gibney and Ellwood, "Magic Trip." Wolfe, *The Electric Kool-Aid Acid Test*, 240.

³⁵⁸ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 57.

³⁵⁹ Jerilyn Lee Brandelius, *Grateful Dead Family Album* (New York, NY: Warner Books, 1989), 29.

³⁶⁰ Gibney and Ellwood, "Magic Trip."

³⁶¹ Kesey, *The Acid Test*. Liner Notes.

“Day Tripper” and other Developments (December 1965)

Over the course of 1965, the word “psychedelic” was increasingly being borrowed across the country to describe various aesthetics and ideas. In Los Angeles, actor Del Close and Wavy Gravy, a comedian and member of the Hog Farm commune, organized a “Lysergic A Go-Go” in November, right at the Cinematheque-16 theater on the Sunset Strip was featuring “Psychedelic Film-Trips” for their audiences.³⁶² On the East Coast, advertisements promoting psychedelic events were also appearing with greater frequency. In New York City, the Village Vanguard jazz club hosted a “psychedelic theater” in April, which featuring Tibetan incense, empire gowns, and meditative speech that was accompanied by jazz music.³⁶³

Subtle references to psychedelic drugs were also making their way into the mainstream media. An important milestone in this development occurred in December of 1965 when the Beatles released their single “Day Tripper,” a song about a girl who enjoyed LSD, but was only partially committed to a hip lifestyle.³⁶⁴ At the time of song’s release, the Beatles were still maintaining their clean-cut image and disclosed neither the song’s meaning nor their own use of LSD, which had started earlier that year.³⁶⁵ Musically, the hit was a relatively straightforward rock song that had little relevance to

³⁶² “Advertisement,” *Los Angeles Free Press*, November 23, 1965, C11.

³⁶³ “Incense and Bass: LSD Show Is S.R.O.,” *New York Times*, April 11, 1965, 58.

³⁶⁴ Walter Everett, *The Beatles as Musicians: The Quarry Men through Rubber Soul* (New York, NY: Oxford University Press, 2001), 316; Barry Miles, *Paul McCartney: Many Years from Now*, 1st American ed. (New York, NY: H. Holt, 1997), 209.

³⁶⁵ “The Beatles and Drugs: LSD,” *The Beatles Bible*, <http://www.beatlesbible.com/features/drugs/3/>. Accessed November 4, 2015.

psychedelic music. Nevertheless, it was the first song by an internationally renowned rock group to focus on recreational drug use.

The Trips Festival and the Rise of Bill Graham and Chet Helms (January 1966)

On the weekend of January 21, 1966, a three-day event known as the Trips Festival took place at the Longshoremen's Hall in San Francisco. The festival was part of a series of fundraisers organized for the San Francisco Mime Troupe by their business manager, Bill Graham. It brought together a vast array of psychedelic artists and celebrities, including Kesey and his Merry Pranksters (who considered the event an official Acid Test), the Grateful Dead, Jefferson Airplane, Big Brother and the Holding Company, and the San Francisco Tape Music Center. The scene at the hall was reportedly chaotic. Bands and theater groups performed concurrently at both ends of the venue, avant-garde films and light shows were projected on the walls and ceilings of the hall, and vats full of LSD-laced Kool-Aid were available for all who wished to partake. The festival was attended by as many as 6,000 local youth, many of whom attended the event in the kind of vintage frontier costumes that had become popular in the Bay Area.³⁶⁶

At the conclusion of the festival, Bill Graham was struck by his fundraiser's success and perceived a business opportunity. As a child, he had belonged to a group of 63 Jewish children who fled Germany in 1939—eleven of which survived the war. He

³⁶⁶ Dominick Cavallo, *A Fiction of the Past: The Sixties in American History*, 1st ed. (New York, NY: St. Martin's Press, 1999), 114.

arrived in the United States in 1941 and had a prolonged stay in an orphanage before being adopted by a Jewish family in the Bronx.³⁶⁷ Despite his difficult childhood, he became a savvy businessman and recognized the considerable market that existed for the experiences that had been provided by the Trips Festival and Family Dog concerts. Within a week of the festival, Graham leased an old beige brick building at 1806 Geary Street in the Fillmore district of San Francisco. It was located in a predominately black neighborhood and had previously served as a popular venue for visiting black performers during the Fifties.³⁶⁸ The building had storefronts on the first floor and a spacious ballroom on the second, which featured a stage, rear balcony, large dance floor, and a large turn-of-the-century bar.³⁶⁹ In February of 1966, Graham's Fillmore Auditorium opened its doors and began presenting shows that were modeled after the Trips Festival.³⁷⁰ Graham's sister Ester ran the kitchen upstairs, serving her matzo-ball soup and salad. As with the Family Dog concerts, a "no booze" sign was posted at the bar where volunteers sold soft drinks.³⁷¹ Describing his approach to the Fillmore, Graham stated:

The attempt I made at the Fillmore was to turn people on, to give them a good time, but to work at it from the sidelines. There was no blueprint, no set of rules. You just had to work hard to create the right kind of environment. I remember at the end of concerts, I wanted to provide an atmosphere that would help people ease back into reality. We played taped

³⁶⁷ Ibid., 113.

³⁶⁸ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 64.

³⁶⁹ Ibid., 115. Luria Castell would later claim that she had brought the Fillmore to Graham's attention in the process of seeking a collaboration between the Family Dog and the Mime Troupe, a charge Graham denies (Sculatti 64)

³⁷⁰ Ibid., 115.

³⁷¹ John Glatt, *Rage & Roll: Bill Graham and the Selling of Rock* (Secaucus, N.J.: Carol Pub. Group, 1993), 36.

classical music and showed slides of birds and trees. I always tried to put myself into the position of the ticket holder.³⁷²

By the winter of 1966, the commitment of Luria Castell and the Family Dog to their events was waning. After a failed attempt to organize another show, Luria ran off with her new boyfriend to Mexico. Leadership of what remained of the Family Dog franchise fell to a young man named Chet Helms, who had arrived in San Francisco in 1962 from Texas. Helms had helped out with previous Family Dog efforts and was also the manager of a local band named Big Brother and the Holding Company.³⁷³ He originally tried to run events under the Family Dog name at the Fillmore, but relations with Bill Graham quickly soured and sent Helms looking for a new venue. He soon found a place on Sutter Street called the Avalon Ballroom, which was far more ornate than the Fillmore. Built in 1913, the Avalon was originally the Puckett Academy of Dance. It featured red-flocked wallpaper, crenelated balconies, gilt trim, and lots of nooks and crannies in which one could—in Helm’s words—”just smoke dope and ball.” The Avalon opened its doors on April 22 with a show featuring the Great Society and a band from New York called the Blues Project.³⁷⁴

From 1966 to 1968, Graham’s Fillmore Auditorium and Helm’s Avalon Ballroom were the premier venues for psychedelic music in San Francisco. The two competed aggressively for band bookings and patrons. The Fillmore and Avalon also became major sponsors of other forms of psychedelic art. Events at each venue were often advertised by

³⁷² Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 66.

³⁷³ Ibid., 48, 66.

³⁷⁴ Ibid., 70.

ornate posters by artists such as Wes Wilson, Stanley Mouse, Alton Kelley, and Victor Moscoso, who were pioneering a new psychedelic visual aesthetic. At the events themselves, musical performances were usually accompanied by psychedelic light and movie shows produced by the likes of Bill Ham, Tony Martin, Jerry Abrams, and others.³⁷⁵ In this way, the two venues gave permanent homes to the artistic and cultural movements that thrived at the Red Dog Saloon, and later the Family Dog dance concerts. They also attracted new people to the psychedelic subculture. In Bill Graham's words:

At the benefits the audience was mostly artists and others who were already on the scene. At the Fillmore they were all searchers and explorers. They left where they were and came in to exchange their identities. People just left the straight world and put on other clothes—like Clark Kent getting into a phone booth.³⁷⁶

Emergence of the Psychedelic Scene in Austin, Texas

Around the same time that the psychedelic music scene in San Francisco was being established, a separate scene was forming in the city of Austin, Texas. This scene was largely centered on a group called the 13th Floor Elevators. Austin was ultimately too restrictive an environment for this scene to flourish like the one in San Francisco. Nevertheless, the Elevators are notable in the history of psychedelic music for the intentionality with which they established a relationship between music and drugs.

³⁷⁵ Ibid., 102.

³⁷⁶ Ibid., 71.

The 13th Floor Elevators (December 1965)

The core members of the Elevators were Roky Erikson (vocals), Stacy Sutherland (guitar), Benny Thurman (bassist), John Ike Walton (drums), and Tommy Hall (jug). Sutherland was born to a family of cattle ranchers in the small town of Kerrville, Texas. He grew up playing guitar and banjo covers of music by Chet Atkins, Buddy Holly, and John Lee Hooker.³⁷⁷ Sutherland experimented with substances at an early age, and would often sniff glue and inhale other gases as a means of getting high—a habit that may have been partially attributable to the prohibition of alcohol in his “dry” county. He eventually became a regular smoker of marijuana and had his first psychedelic experience with peyote.³⁷⁸ Walton was a friend of Sutherland who also grew up in Kerrville and enjoyed many of the same activities. He came from a wealthy oil family, whose money helped bankroll the Elevators’ expenses.³⁷⁹ By 1965, both Walton and Sutherland had been expelled from their respective colleges—Walton for bad grades, Sutherland for being involved with a shipment of marijuana from Mexico.³⁸⁰ The pair subsequently moved to Austin where they met bassist Benny Thurman. Thurman had played the violin from an early age and studied the instrument at the University of Texas at Austin for a brief time before dropping out.³⁸¹ The trio soon got a regular gig playing a beach club called the Dunes in Port Aransas under the name the Lingsmen with a singer named Max Range

³⁷⁷ Paul Drummond, *Eye Mind: The Saga of Roky Erickson and the 13th Floor Elevators* (Los Angeles, CA: Process Media, 2007), 17.

³⁷⁸ *Ibid.*

³⁷⁹ *Ibid.*, 19.

³⁸⁰ *Ibid.*, 18, 20.

³⁸¹ *Ibid.*, 21.

serving as their lead vocalist. At the Dunes, the band performed rock n' roll hits such as Bo Diddley's "Bo Diddley," the Surfari's "Wipe Out," and the Kink's "You Really Got Me." During their time at Port Aransas, Sutherland and Thurman were increasingly taking drugs, including codeine and cocaine.³⁸² Late in the summer of 1965, the band met up with a University of Texas at Austin student named Tommy Hall, from whom Sutherland used to buy marijuana. After hearing the Lingsmen play, Hall made arrangements to get together with the band back in Austin.³⁸³

Beginning in 1961, Tommy Hall had studied chemical engineering and psychology at the University of Texas at Austin.³⁸⁴ He became involved in the folk scene at his new school and eventually took up the jug. Through this scene, he became an acquaintance of Janis Joplin and Chet Helms, both of whom would soon become important figures in San Francisco.³⁸⁵ Hall was an intellectual who was knowledgeable about music history and philosophy—especially that of Nietzsche and Hegel. He was also fond of Aldous Huxley, and supported the folk community's mission to reconnect with a mythical American past, which tangentially involved experimentation with marijuana and peyote.³⁸⁶ During his time as a student, he began to sell marijuana, and his knowledge of drugs and chemistry earned him the nickname "Turn on Tommy." By 1965, Tommy had lost interest in his studies and dropped out of college to pursue his passions in the

³⁸² Ibid., 25.

³⁸³ Ibid., 17, 26.

³⁸⁴ Ibid., 24, 32.

³⁸⁵ Ibid., 37.

³⁸⁶ Ibid., 39. Paul Drummond claims that peyote was the primary psychedelic being used in Austin in the early Sixties, as LSD did not become available until 1965 (Drummond 38).

underground scene.³⁸⁷ He devoted much of his time to learning about experimental psychology, and occasionally played the jug in a band called the Conqueroo Root. Tommy had also become increasingly interested in popular music after being impressed by the creativity of the Beatles and Bob Dylan. He was especially fond of Dylan's ability to make poetry accessible through music, and wanted to form a band so that he could express his own ideas through similar means.³⁸⁸

When Sutherland, Walton, and Thurman met up with Tommy Hall in Austin, he convinced them to take on Roky Erickson who at that time was the lead singer for a group called the Spades.³⁸⁹ Erickson had grown up in Austin where his father was a successful architect. He acted, sang, and played a variety of musical instruments from a young age, including electric guitar.³⁹⁰ As a teenager, Erickson was constantly cutting classes to watch horror movies at the local cinema, and began smoking marijuana around the age of seventeen.³⁹¹ His bad habits and lack of work ethic eventually led to him being expelled from high school.³⁹² As the lead singer of the Spades, Roky was known for his charismatic vocals, which were inspired by artists such as James Brown, Little Richard, and Screamin' Jay Hawkins. His style as a singer was also informed by his love of the hellfire preachers that could be heard on Mexican radio stations, which blasted their powerful signals northward.

³⁸⁷ Ibid., 40-46.

³⁸⁸ Ibid., 31, 47, 48.

³⁸⁹ Ibid., 67.

³⁹⁰ Ibid., 51, 54.

³⁹¹ Ibid., 58, 64.

³⁹² Ibid., 67.

Tommy Hall decided to play his jug in the new band. Notably, Hall played the jug by humming pitches into it instead of the traditional practice of blowing air over the top of the spout. He amplified the instrument, which was essentially an echo chamber for his voice, and would often perform fast, bebop-like runs over the band's music. Hall believed that the jug gave the band a trademark sound, though many of the other band members did not like its presence.³⁹³ Hall nevertheless fostered a sense of community among the band and gave it an explicit psychedelic mandate. Convinced that psychedelic drugs were a means of progressing humanity, Hall was determined that the new band "play the acid" and evangelize the merits and ethos of these substances. The rest of the band followed Hall's lead, though many of them conceptualized psychedelic drugs in a different manner. Sutherland, Thurman, and Erickson all came from extremely religious households and understood their use of psychedelic drugs and the band's mandate through a spiritual lens rather than a philosophical one.³⁹⁴

Keeping with his vision, Hall insisted that the band play under the effects of psychedelic drugs. Walton quickly found that he was unable to keep time under the influence of psychedelics, and stopped taking them all together. Nevertheless, the other band members continued to play on psychedelic drugs, often ingesting either LSD or mescaline before rehearsals and performances.³⁹⁵ This practice is very notable. In my research, I have found it to be quite rare that musicians actually perform under the

³⁹³ Ibid., 73-74.

³⁹⁴ Ibid., 16, 21, 52, 115.

³⁹⁵ Ibid., 80, 86.

influence of powerful psychedelics like LSD. Indeed, the practice sometimes negatively affected the quality of the Elevators' performances, but according to Sutherland it also had the potential to yield profound experiences:³⁹⁶

As far as playing it, [being on LSD] was a lot more intense. Like I feel I was a lot more imaginative on acid. [...] Some of the greatest experiences I've ever had in my life musically were on acid. [...] [The music] would have some kind of force; I can't explain it [except] that it was like another dimension, like a wave, a wall... it's like it only happened maybe six or seven times the whole time we were together, and we never got it on record... but it emotionally affected me, raised me up.³⁹⁷

In later years, fellow band members would accuse Hall of using drugs to manipulate the group, and blame his drug concoctions for the mental health problems they suffered in subsequent years.³⁹⁸ Roky Erickson, in particular, would spend a considerable portion of his life in mental health institutions.³⁹⁹

The Elevators had their first performance at a venue called the Jade Room in Austin on December 8, 1965. Erickson had previously released a hit song with the Spades entitled "You're Gonna Miss Me," which was still being played on local radio stations. The song was about a break up and had nothing to do with the Elevators' psychedelic mandate, but the band rushed into their first performance eager to capitalize on the song's success, and appropriate the hit as their own. Their set list that night also included "We Sell Soul," another Erickson original, Bob Dylan's "It's All Over Now," the Beatles' "I'm Down," Them's "Gloria," the Kink's "All Day and All of the Night," and other rock

³⁹⁶ Ibid., 86.

³⁹⁷ Ibid., 81.

³⁹⁸ Ibid., 80, 83.

³⁹⁹ Ibid., 81. There is some evidence to suggest that Erickson had pre-existing mental health problems that may have been exacerbated by his drug use (Drummond 344).

hits of the day.⁴⁰⁰ For the remainder of 1965, the band performed around the Austin area and worked on writing original material. According to Sutherland, some people who witnessed the band perform told them that they succeeded in their mission to “play the acid”:

We played some shows when we were on acid and we had people come up to us saying they were more stoned now, digging our group, than when they were on peyote. It had done that to their heads.⁴⁰¹

Moreover, as in the new psychedelic venues in San Francisco, the Elevators’ early audiences danced to their music when they performed.⁴⁰² This became less true as Tommy Hall assumed the role of lyricist and began introducing dense blocks of lyrics that challenged both Erickson’s energetic vocal style and the audience’s ability to dance.⁴⁰³ By Christmas of 1965, the band also started having trouble with local police as the group was increasingly seen as the figurehead of drug culture in the Austin area.⁴⁰⁴ The group’s problems with the law would only worsen as time passed, and ultimately facilitate the undoing of the group over the course of the next few years.

Psychedelic Folk and Blues

Big Brother and the Holding Company (January 1966)

Back in San Francisco, Big Brother and the Holding Company, a band managed

⁴⁰⁰ Ibid., 86.

⁴⁰¹ Ibid., 81.

⁴⁰² Ibid., 92.

⁴⁰³ Ibid.

⁴⁰⁴ Ibid., 96.

by Chet Helms, began to rise to prominence thanks to an artist who came from the Austin scene where the Elevators were quickly gaining popularity.

Big Brother and the Holding Company was born out of casual jam sessions that took place between three guitarists, Peter Albin, James Gurley, and Sam Andrew, in the basement of 1090 Page Street in San Francisco beginning in 1965.⁴⁰⁵ The trio's sessions were reportedly notable for their lack of structure and strange improvised sounds that resulted. Peter Albin, who eventually came to play bass in the group, recounts:

We'd do six bars and then go into something different every time. At the end, we'd come back to the theme and James would shake his Danelectro amp for a funky reverb effect that sort of sounded like thunder, you know, in the spirit of the piece. We were never really into jazz. We *thought* we were, but we could never play a single jazz lick.⁴⁰⁶

Gurley in particular was a master at creating odd sounds with his instrument. Describing this ability, Chet Helms stated:

He could make sounds like breaking glass on guitar and it was somehow still rhythmic. There was something fresh and innovative about him that was, in some ways, diminished by the demands that people put on him to become a formal musician.⁴⁰⁷

The trio joined with a drummer named Chuck Jones to form a complete band. At the forefront of the group was Albin, who served as the band's singer in their early days. Albin would often leap and twirl around the stage in a black frock coat during the group's performances. He also enjoyed adopting a drug-obsessed alter ego on stage that he called "The LSD Preacher."⁴⁰⁸ The band's setlist encompassed a diverse array of music,

⁴⁰⁵ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 48, 79.

⁴⁰⁶ Ibid., 79.

⁴⁰⁷ Ibid.

⁴⁰⁸ Ibid., 80.

including covers of *I Dovregubbens hall* (In the Hall of the Mountain King) from Edvard Grieg's incidental music for Ibsen's *Peer Gynt*, Otis Redding's "That's How Strong My Love Is," and the traditional folk songs "Coo" and "Down On Me."⁴⁰⁹ The band's first performance was at the Open Theater in Berkeley in January of 1966.⁴¹⁰ That same month, they played the Trips Festival at Longshoreman Hall and shortly thereafter became the house band for Chet Helms's Avalon Ballroom.⁴¹¹

In June of 1966, Big Brother and the Holding Company were the benefactors of a talented blues singer from the Austin scene named Janis Joplin.⁴¹² Joplin had previously visited San Francisco at the encouragement of fellow Texan and Big Brother manager Chet Helms. By 1963, she was performing with the likes of Jorma Kaukonen and Rod McKiernan, and was establishing herself as a local musician. Unfortunately, she soon developed an addiction to amphetamines and was sent home by Helms and her other friends.⁴¹³ By the spring of 1966, however, Helms felt the shift towards psychedelic substances had improved drug culture in the Bay Area and was eager for Joplin to come sing for his new band.⁴¹⁴ In contrast to other members of the band, Joplin was foremost a fan of alcohol. She had tried peyote while at the University of Texas in Austin and enjoyed marijuana, but was ultimately not a big fan of powerful psychedelics. Joplin

⁴⁰⁹ "Big Brother and the Holding Company - History," <http://www.bbhc.com/history.html>. Accessed December 6, 2014.

⁴¹⁰ Ibid.

⁴¹¹ ———, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 60; "Big Brother and the Holding Company - History."

⁴¹² "Timeline," <http://www.janisjoplin.com/timeline.php>. Accessed January 6, 2015.

⁴¹³ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 50.

⁴¹⁴ Ibid., 81.

eventually came to call Big Brother an “alcydelic” band—one fueled by both alcohol and psychedelics.⁴¹⁵

Janis performed with the band for the first time on June 10, 1966 at the Avalon Ballroom.⁴¹⁶ That winter, drummer Chuck Jones left the band and was replaced by David Getz.⁴¹⁷ Big Brother remained a local San Francisco hit for the remainder of 1966 and much of 1967. It was not until after their well-received performance at the Monterrey Pop Festival that Mainstream Records gave them the opportunity to record their self-titled debut album, which was released in September of 1967. A year later, Columbia released the group’s second album, *Cheap Thrills*, which was immensely successful on the Billboard charts and made Joplin and her cover of “Piece of my Heart” famous.⁴¹⁸ Unfortunately, the band produced no singles or albums in the period prior to the summer of 1967, which is the focus of this chapter. There is, however, a recording of the band performing at California Hall in San Francisco on July 28, 1966 that was released by Rhino records in 1984. This recording gives some insight into the band’s sound in the early months of their existence.⁴¹⁹ The setlist for the concert included many of the band’s pre-Janis favorites, such as “Down On Me” and “Coo”; Joplin’s original song “Women Is Losers”; and other folk and blues standards like Willie Mac Thorton’s “Ball and Chain” and the traditional song “I Know You Rider.” The band’s performance of these songs is

⁴¹⁵ Edward Willett, *Janis Joplin: Take Another Little Piece of My Heart* (Berkeley Heights, NJ: Enslow Publishers, 2008), 44, 66.

⁴¹⁶ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 81.

⁴¹⁷ “Big Brother and the Holding Company - History.”

⁴¹⁸ Martin Strong, *The Great Psychedelic Discography* (Edinburgh: Canongate, 1997), 24.

⁴¹⁹ Big Brother and the Holding Company, *Big Brother & the Holding Company Live* (New York, NY: Rhino Records RNLP-121, LP, 1984).

up-tempo and teeming with intensity. Joplin and Albin deliver their respective vocals with a tremendous amount of raw power and melodic embellishment—their voices often breaking and drifting out of tune from their forceful delivery. Their voices sometimes interact awkwardly in passages where they attempt to sing together. Nevertheless, though the tone color of Joplin’s voice is characteristically hoarse, there is an incredible resonance to it that is not present on many of her later, more popular recordings. In most of the songs, Joplin and Albin step back at some point for a guitar solo, which is presumably played by Gurley. These solos are often equally raw, replete with fast trills, manic string bends, and various sound effects created through feedback and unusual manipulations of the instrument. The guitar solos also have a tendency to venture off key.

Indeed, Jefferson Airplane bassist Jack Casady recalls:

Since they had less of a mastered, polished approach, they could sometimes do really interesting stuff and make it work. They’d play solos or some combination of notes that, if you’ve ever played live music, you’d never think of doing, but somehow it worked. You’d scratch your head and say, “it works, but what key is that guy in?”⁴²⁰

Indeed, Gurley relies heavily on pentatonic scales in his solos, which often have the ability to sound less offensive when played out of tonal context than a complete major or minor scale. Beneath the odd yet expressive vocal and lead guitar work of these songs is often a rather banal and monotonous rock, blues, or folk accompaniment being played by the rhythm guitar, bass, and drums. The lack of interest in the rhythm parts is arguably the most notable difference between these early recordings and the more mature iterations of these songs on later albums.

⁴²⁰ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 80.

While Big Brother arguably lacked musical cohesion in the early part of their existence, it is clear from accounts and surviving recordings that they were pushing musical boundaries in San Francisco. The band is particularly notable for creating surreal sounds without the assistance of a studio. Gurley, in particular, is notable for incorporating unusual sounds into his guitar work prior to Jimi Hendrix's American debut. In a recent interview, Sam Andrew described Gurley as an "intuitive player" who was "interested in pure sound rather than what the notes were or how they fitted in a chord."⁴²¹ From a cultural perspective, Big Brother was notable for being a rock band that featured a vocalist who was not only a woman, but one who defied societal ideals in her appearance, sound, and behavior. Moreover, she directly challenged the patriarchal status quo in songs such as "Women is Losers" and "Ball n' Chain" long before feminism was a popular movement.

Fifth Dimension (March 1966)

Down the coast in Los Angeles, the Byrds continued to pioneer their own distinct brand of folk rock. In March of 1966, the Byrds released a single entitled "Eight Miles High," which featured the same compression effect used to create the "jingle jangle" sound on the band's cover of "Mr. Tambourine Man." While compression was applied to the rhythm guitar on this track, Roger McGuinn also used the prolonged sustain of the

⁴²¹ Sam Andrew of *Big Brother and the Holding Company Interview (Podcast)*, (<http://goingthruvinyl.com/>, March 2014).

effect to imitate John Coltrane's saxophone riffs from the song "India" on lead guitar. McGuinn's disjunctive bop-inspired melodies are balanced by the sustained arpeggiated chord tones ringing from the rhythm guitar and the song's close vocal harmonies. The dreamy feel of these musical features is a fitting accompaniment to the text, which is comprised of six strophes that each contained two short, nonsensical descriptive couplets:

Round the squares
Huddled in storms
Some laughing
Some just shapeless forms

Sidewalk scenes
And black limousines
Some living
Some standing alone⁴²²

Many assumed the song was about drugs when it was first released, including a radio industry heavyweight named Bill Gavin. Gavin was the author of a publication entitled *Bill Gavin's Record Report*, which programmers relied heavily upon in making content choices. In April of 1966, Gavin opined that the lyrics of "Eight Miles High" constituted the "encouragement and/or approval of the use of marijuana and LSD," and recommended that the song not be approved for airplay. The Byrds argued that the song was inspired by the band's plane ride to England, and eventually radio stations resumed airplay of the song. Its prospects were irrevocably damaged, however, and it peaked at number 14 on the Billboard charts.⁴²³ Later in the 1980s, the band acknowledged that the song was inspired by *both* their trip to England and their experiences with drugs, with

⁴²² The Byrds, *Fifth Dimension* (New York, NY: Columbia CS 9349, 1966), sound recording.

⁴²³ Unterberger, *Eight Miles High: Folk rock's Flight from Haight-Ashbury to Woodstock*, 3.

member David Crosby declaring “Of course it was a drug song! We were stoned when we wrote it.”⁴²⁴

The Byrds released the parent album of “Eight Miles High” in June of 1966. Entitled *Fifth Dimension*, the LP expanded musically and thematically upon the folk rock style of their previous album *Mr. Tambourine Man* (1965). The album opens with the song “5D (Fifth Dimension),” which like “Eight Miles High” made allusions to psychedelic drugs without direct mention of them. In one such allusion, the song’s narrator makes reference to feeling as though he or she was dead—a common psychological effect of psychedelic drugs:⁴²⁵

All my two-dimensional boundaries were gone
I had lost to them badly
I saw that world crumble and thought I was dead
But I found my senses still working.⁴²⁶

The other tracks on the album further explored the band’s unique folk rock sound. Songs such as “I See You” and “What’s Happening” featured more of Roger McGuinn’s experimental lead guitar work involving the bebop aesthetic and Eastern-sounding melodies. The album was a reasonable success peaking at number 24 on the Billboard charts and is considered an important milestone in the introduction of psychedelic music to the mainstream audience.⁴²⁷

⁴²⁴ Alan Lewens, *Popular Song: Soundtrack of the Century* (New York, NY: Billboard Books, 2001), 126.

⁴²⁵ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 131.

⁴²⁶ Byrds, *Fifth Dimension*.

⁴²⁷ Jim Irvin, *The Mojo Collection: The Greatest Albums of All Time*, 4th ed. (Edinburgh: Mojo Books, 2000), 70.

Country Joe and the Fish (June 1966)

In August of 1966, a band called Country Joe and the Fish began to gain prominence in the San Francisco music scene. The group was comprised of Joe McDonald (vocals), Barry Melton (guitar), Bruce Barthol (bass), David Cohen (keyboards), and Gary “Chicken” Hirsch (drums).⁴²⁸ In contrast to most of the other Bay Area bands, Country Joe and the Fish wrote and performed music that was *overtly* political. Before forming their band, McDonald and Melton had previously performed at draft protests.⁴²⁹ Moreover, the band’s name was an amalgamation of a nickname for Josef Stalin and Mao Zedong’s statement that a good revolutionary moves among the peasantry like “a fish” in water.⁴³⁰ In this way, the band’s music expressed communist ideas and advocated for left-wing ideologies that had been promoted by segments of the American folk music community since the 1930s.

Many of the band’s songs had a traditional folk sound that lacked the surreal qualities of most psychedelic music. By 1966, however, the band was playing two songs that made important contributions to the psychedelic genre: “Bass Strings” and “Section 43.” The band released both of these songs on a self-titled EP with Vanguard Records,

⁴²⁸ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*.

⁴²⁹ Country Joe and the Fish, *The First Three EPs* (Berkeley, CA: Rag Baby Records RAG-1008SP, LP, 1980). Liner notes. I believe it is generally accepted that most rock musicians in the Sixties—especially those on the West Coast—tended to lean towards more liberal values. But the rock genre has been imbued with a spirit of rebellion since the days of Elvis, and strict ideologies of any persuasion seem to have been fundamentally at odds with its nature. There are, of course, several rock songs from the Sixties that make explicit political statements, but they are an exception to the norm.

⁴³⁰ Nadya Zimmerman, *Counterculture Kaleidoscope: Musical and Cultural Perspectives on Late Sixties San Francisco* (Ann Arbor, MI: University of Michigan Press, 2008), 78.

which was recorded during a session that occurred in June of 1966 at Sierra Sound Studios in Berkeley.⁴³¹ Both songs featured electric lead, rhythm, and bass guitars, as well as an organ, harmonica, drum kit, and some hand percussion. While these were typical folk-rock instruments, the band employed them in very innovative ways. “Bass Strings” features a guitar track that is heavily processed with tremolo to create a distinctive shuttering effect, organ drones, a fluid bass, and a dreamy *legato* vocal melody that makes explicit references to marijuana:

Hey partner, won't you pass that reefer round,
My world is spinnin' yeah, just got to slow it down.
Oh, yes you know I've sure got to slow it down.
Get so high this time that you know
I'll never come down, I'll never come down.⁴³²

“Section 43” is an instrumental jam in the key of D minor that occupied the entire B-side of the EP. The song employs a rondo form that is structured “ABACAB.” The “A” section features a distinctive bass guitar riff and organ drone, which together form a backdrop for a reverb-rich lead guitar solo on the D-minor scale. The contrasting “B” section consists of the lead guitar arpeggiating through various diatonic chords using common tone progressions, as well as a prominent tambourine track. The brief “C” section is rhythmically and melodically disjunctive, and quite dissonant. The final “B” section, which is perhaps the most striking part of the entire song, features a harmonica playing unusual tone colors that sound as though they were created by a ring modulator and not a simple wind instrument.

⁴³¹ Country Joe and the Fish, *The First Three EPs*. Liner notes.

⁴³² Ibid.

The EP containing these songs did not receive widespread distribution, but it was a popular niche item that was sold as far away as London.⁴³³ Nevertheless, the band's willingness to feature this material on one of their early records suggests that they were probably performing these songs—or engaging in similar jam sessions—in their live performances around the Bay Area.

Advances in Electro-acoustic Music and Studio Technology

In the mid-Sixties, several technological developments in the processing and creation of sound began to work their way into music studios. These technologies were quickly adopted by artists seeking to create surreal sounds on their albums, and inspired many new production aesthetics.

Introduction of the Voltage-Controlled Synthesizer (1966)

In 1966, developments in the field of electro-acoustic music yielded consumer technologies that would greatly affect the course of psychedelic music. Chief among them was the modular voltage-controlled synthesizer, which enabled musicians to generate sounds with electricity that were as strange and surreal as the experiences people were having on psychedelic drugs.

⁴³³ Ibid.; Surviving copies of this EP seem to be quite rare.

Many technological advances in the Sixties were enabled by the transistor, which was developed in the Fifties and widely incorporated into electronic devices in the following decade. Transistors had many advantages over the vacuum tubes they replaced: they were a fraction of the size, extremely durable, capable of performing tasks at lower voltages (enabling many devices to run off batteries), did not require a warm-up period, emitted considerably less heat, and could be manufactured faster and cheaper than their predecessor. Transistors had many potential applications in musical equipment. In 1962, for example, Gibson revolutionized the process of adding audio effects to the sound of electric instruments with the release of its transistor-based FZ-1 Maestro Fuzz Tone “stomp box,” which allowed a musician to modify his or her sound with a portable in-line component.⁴³⁴

The transistor’s potential for electronic sound synthesis was first grasped by Harald Bode, an engineer who was renowned for inventing an early keyboard synthesizer called the Melochord. In 1961, Bode published an article in which he noted that the miniaturization afforded by transistor technology could be used to create self-contained modular studio components.⁴³⁵ At the time, synthesizers were large, expensive machines that would occupy whole rooms at universities, and often required electrical engineers to build and maintain.

Despite Bode’s early interest, it was ultimately American engineer Robert Moog who realized this potential. In 1964, Moog created a voltage-controlled oscillator and

⁴³⁴ Hicks, *Sixties Rock: Garage, Psychedelic, and Other Satisfactions*, 18.

⁴³⁵ Harald Bode, “European Electronic Musical Instrument Design,” *Journal of the Audio Engineering Society* 9 (1961): 267.

amplifier for composer Herbert Deutsche. As word of Moog's talents spread throughout the composition community, the engineer soon found himself receiving custom equipment orders from across the country. Later that year, Moog combined his various voltage-controlled innovations to create a modular synthesizer that revolutionized electro-acoustic music.⁴³⁶

Prior to Moog and others, the components of synthesizers were completely independent. A composer would adjust the knobs on an oscillator so that it produced a certain pitch, connect it to a filter that would be set to remove certain harmonics from the sound, and route the filter to an amplifier before playing it over a loudspeaker or recording it. While all of the aforementioned devices contributed to the final output of the synthesizer, they did not *interact* with or control one another. They simply received and passed the audio feed according to the order in which the composer had connected them. The components of voltage-controlled synthesizers like Moog's were capable of controlling one another through a network of electrical signals. A keyboard module, for instance, could be connected to the oscillator module and used to control the pitch it produced; an envelope generator—which controls the attack, sustain, and diminution of a sound—could be connected to both the oscillator and amplifier modules to create fluctuations in pitch and volume similar to that of acoustic instruments. Conditional controls could also be configured. For example, a device could be set to activate if a sound exceeded a certain volume or frequency threshold. In short, whereas previous synthesizers were relatively static devices connected by a daisy chain of audio feeds, the

⁴³⁶ Chadabe, *Electric Sound: The Past and Promise of Electronic Music*, 141.

voltage-controlled synthesizer was engineered so that its modular components could interact in a *dynamic* fashion.⁴³⁷

Around the same time, Moog was premiering his prototypes, an engineer named Donald Buchla was developing his own design based on the same technology. Buchla created his unit in collaboration with Morton Subotnik and Ramon Sender. Both men taught at Mills College and were responsible for founding the San Francisco Tape Music Center in 1961.⁴³⁸ But by the mid-Sixties, Sender and Subotnik had grown tired of tape music and desired a new medium for their creativity.”⁴³⁹ The trio developed a modular unit that was fundamentally similar to that of Moog, though Buchla’s design was notable for two features. The first was its pressure-sensitive keyboard, which was created using an array of metallic strips that were sensitive to changes in pressure. The second was its sequencer. This device allowed the operator to set and easily trigger an automated sequence of notes, sounds or volumes. The sequencer was specifically designed to alleviate Sender and Subotnick’s frustration with tape loops and slices by allowing them to repeat material by means of automation. The first model, known as the “Electric Music Box,” was complete in early 1965, and eventually evolved into the Buchla Series 100 synthesizer.⁴⁴⁰ A year later, Subotnick began to receive commissions from Nonesuch Records to create pieces using Buchla’s design. Using a replica of the original Electric

⁴³⁷ Robert Moog, “Voltage-Controlled Electronic Music Modules,” in *Sixteenth Annual Fall Convention of the Audio Engineering Society* (1964).

⁴³⁸ Joel Chadabe, *Electric Sound: The Past and Promise of Electronic Music* (Upper Saddle River, NJ: Prentice Hall, 1997), 45.

⁴³⁹ *Ibid.*, 146.

⁴⁴⁰ *Ibid.*, 147.

Music Box, Subotnick recorded some of his most famous compositions including *Silver Apples of the Moon* (1967), *The Wild Bull* (1968), and *Touch* (1969).⁴⁴¹

In 1966, both Moog and Buchla started their own manufacturing companies and created consumer versions of their prototypes: the Moog Synthesizer and the Buchla Electronic Music System. While traditional synthesizers had been the purview of composers at academic institutions who stemmed from the classical tradition, the size, simplicity, and affordability of these new consumer units resulted in the synthesizer's adoption by rock, jazz, and pop musicians. Moreover, the capacity of these units to generate an endless array of novel, unearthly sounds resulted in their use in psychedelic songs such as "Space Odyssey" by the Byrds, "Strange Days" by the Doors, and "Because" by the Beatles.⁴⁴²

Pet Sounds and Revolver: Shifting Ideals in the Studio (Summer of 1966)

The middle of 1966 witnessed the release of two very important albums in the history of popular music: the Beach Boys' *Pet Sounds* and the Beatles' *Revolver*.⁴⁴³

In December of 1964, the lead singer of the Beach Boys, Brian Wilson, suffered a nervous breakdown and stopped touring with the rest of the group. He began work on the

⁴⁴¹ Ibid., 148.

⁴⁴² A lesser-known album of psychedelic music that prominently features the modular synthesizer is Hal Blaine's *Psychedelic Percussion* (1967).

⁴⁴³ The Beach Boys, *Pet Sounds* (Los Angeles, CA: Capitol T-2458, LP, 1966); The Beatles, *Revolver* (London, UK: Parlophone PMC 7009, LP, 1966).

material that would become *Pet Sounds* in November of 1965, but it was not until the release of the Beatles' *Rubber Soul* the following month that Wilson's vision for his album became clear.⁴⁴⁴ Wilson believed that *Rubber Soul* set a new standard for what was possible in the studio, and was determined to meet or surpass its quality. He had also been taking heavy doses of LSD during this period, and wanted to make an album of meaningful music that departed from the group's usual "fun in the sun" lyrics, which were usually written by his bandmate Mike Love. To this end, Wilson approached lyricist Tony Asher to help put words to his musical introspection.⁴⁴⁵ The album, released in May of 1966, is a collection of music that Jim DeRogatis has described as "a tender and touching plea for love and understanding."⁴⁴⁶ Indeed, the songs on *Pet Sounds* are extremely introspective and reflect an individual who is longing for empathy. The epitome of this sentiment is the track "I Know There's an Answer." This song was originally titled "Hold On to Your Ego," but was changed after Mike Love protested what he felt was an overt reference to drugs.⁴⁴⁷ Nevertheless, the song's underlying message was clear on the final album:

I know so many people who think they can do it alone
They isolate their heads and stay in their safety zones
Now what can you tell them
And what can you say that won't make them defensive
I know there's an answer
I know now but I have to find it by myself.⁴⁴⁸

⁴⁴⁴ David M. Beard, "The Beach Boys: Pet Sounds," *Goldmine* 37, no. 3: 26.

⁴⁴⁵ Irvin, *The Mojo Collection: The Greatest Albums of All Time*, 64.

⁴⁴⁶ DeRogatis, *Turn on Your Mind: Four Decades of Great Psychedelic Rock*, 34.

⁴⁴⁷ Beard, "The Beach Boys: Pet Sounds," 26.

⁴⁴⁸ The Beach Boys, *Pet Sounds*.

In this way, *Pet Sounds* is distinct for capturing an aspect of psychedelic experience that seldom makes its way into popular culture. Psychedelic drugs have the power to lessen one's sense of self and allow him or her to feel closer to—or even a part of—their surroundings.⁴⁴⁹ While this is often a very meaningful experience, it can also precipitate a sense of isolation: the normal world—filled with people who have never experienced psychedelics—can feel like a very lonely place.⁴⁵⁰ Brian Wilson would have a long battle with depression in the years ahead, and it is likely that his experience of psychedelics was colored by this mental illness. Nevertheless, I believe he captured a very intimate aspect of psychedelic drugs on the album.

Pet Sounds was also a groundbreaking album from a composition and production standpoint. It was recorded over several sessions at CBS Columbia Studios, Gold Star Studios and Western Records Studios in Hollywood. The echo chambers at Gold Star and Western were famous for imbuing tracks with their distinctive ambiances, and flavor sounds throughout the album.⁴⁵¹ At CBS Columbia, Wilson used the studio's state-of-the-art Ampex eight-track recorder to mix his elaborate instrumental parts into a single track, allowing him to devote the remaining seven tracks to high fidelity vocals. Notably, Wilson produced the final master track in mono and not stereo, adhering to his

⁴⁴⁹ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 131.

⁴⁵⁰ This statement is based on part on my personal experience, and those that have been related to me by others.

⁴⁵¹ Howard Massey, *Behind the Glass: Top Record Producers Tell How They Craft the Hits*, 2 vols. (San Francisco, CA: Miller Freeman Books, 2000), 46. Echo chambers were specially engineered rooms in studios into which sound could be played through a loudspeaker, affected by the acoustics of the room, and captured by microphones.

longstanding preference for a single channel over stereo sound.⁴⁵² Musically, Wilson employed a rich variety of musical sounds and styles on the album. He was very receptive to suggestions from his studio musicians concerning ways to embellish his simple song structures with additional interest.⁴⁵³ He also employed a variety of instruments on the album that were not commonplace in American popular music (especially that of the Beach Boys), including French horn, accordion, violin, cello, saxophone, Theremin, organ, harpsichord, flute, and others.⁴⁵⁴ Moreover, Wilson employed innovative techniques to create *new* sonorities. Earlier in his career he had trained in the studio with Phil Spector, a producer who was famous for having multiple musicians play the same part on the same instrument and then fusing them together to create a thick production aesthetic that came to be called the “wall of sound.”⁴⁵⁵ Wilson applied his mentor’s penchant for layering in a different manner, however. Instead of layering the same instrument on the same part, Wilson layered *different* instruments playing the same part and fused the sounds in the studio to create new sonorities. For instance, “I Know There’s An Answer” opens with a driving rhythm that was created by fusing an organ and tack piano playing the same part in order to create what Wilson

⁴⁵² Tony Bacon and Paul Trynka, *Rock Hardware: The Instruments, Equipment, and Technology of Rock*, 1st ed. (New York, NY: Harmony Books, 1981), 125.

⁴⁵³ Scott Schinder and Andy Schwartz, *Icons of Rock: An Encyclopedia of the Legends Who Changed Music Forever* (Westport, CT: Greenwood Press, 2008), 114.

⁴⁵⁴ Keith Badman, *The Beach Boys: The Definitive Diary of America's Greatest Band, on Stage and in the Studio* (Milwaukee, WI: Hal Leonard, 2004), 120-25.

⁴⁵⁵ Virgil Moorefield, *The Producer as Composer: Shaping the Sounds of Popular Music* (Cambridge, MA: MIT Press, 2005), 16.

describes as “a third sound.”⁴⁵⁶ In all, *Pet Sounds* was a surrealistic aural experience that set a new precedent for what could be achieved in the studio.

The Beatles released *Revolver* in August of 1966—just a few months after *Pet Sounds* arrived in record stores. The Beatles, like Wilson, had grown tired of the stage and quit touring a few weeks after releasing this album. Moreover, they too found themselves intrigued by the creative possibilities of the modern studio, an interest that only intensified after the band received a sneak preview of *Pet Sounds*.⁴⁵⁷ *Revolver* is notable for two songs by John Lennon that demonstrate the band’s new direction in the studio and owe their inspiration to LSD. The first, “She Said She Said,” was a rock song that—like many tracks on the album—was replete with thick, layered sounds that had been created through automatic double tracking. The lyrics of the song were inspired by comments made to Lennon by Peter Fonda while the two men were under the influence of LSD in California.⁴⁵⁸

She said
“I know what it’s like to be dead”
“I know what it is to be sad”
And she’s making me feel like I’ve never been born.⁴⁵⁹

The second song, “Tomorrow Never Knows,” was the last song on *Revolver*. It is a true feat of experimentation in the studio, which sounds more like a piece of avant-garde tape

⁴⁵⁶ Ibid., 17.

⁴⁵⁷ Robert Rodriguez, *Revolver: How the Beatles Re-Imagined Rock 'N' Roll* (Montclair, NJ: Backbeat Books, 2012), 82.

⁴⁵⁸ John Luke Stevens and Susan Gedutis Lindsay, *The Songs of John Lennon: The Beatles Years* (Boston, MA: Berklee Press, 2002), 165.

⁴⁵⁹ The Beatles, *Revolver*.

music than a song by a rock group. The track featured Lennon's vocals being played through a swirling Leslie speaker, five viable-speed tape loops, and some very inventive drumming on slackened toms by Ringo.⁴⁶⁰ Lennon penned the lyrics after reading *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead* by Leary, Alpert, and Metzner under the influence of the drug, and borrowed many passages from this guide.⁴⁶¹

Turn off your mind, relax and float down stream
It is not dying, it is not dying
Lay down all thoughts, surrender to the void
It is shining, it is shining
Yet you may see the meaning of within
It is being, it is being.⁴⁶²

Both *Pet Sounds* and *Revolver* evidence a shifting power dynamic between artists and record labels. At the beginning of the Sixties, the vast majority of artists were given little to no control over the recording and production of their music. The artist's product was the music they performed live on stage, and it was the right and responsibility of the label's staff to refine, capture, and sell this product on record. Studio time and technology was expensive, so artists were expected to quickly perform a few takes of their song and be on their way. In some cases, if an artist could not record their material efficiently, session musicians were quietly brought in to replace them on the album. The well-documented accounts of the Beatles' recording *Please, Please, Me* and the Byrds' *Mr.*

⁴⁶⁰ Bromell, *Tomorrow Never Knows: Rock and Psychedelics in the 1960s*, 95.

⁴⁶¹ Ibid., 94.

⁴⁶² The Beatles, *Revolver*.

Tambourine sessions are perfect illustrations of this working relationship.⁴⁶³ By 1966, however, both the Beatles and the Beach Boys were extremely valuable to their respective labels and were in a position to demand control over the production of their music. Wilson was permitted to spend hours of studio time perfecting *Pet Sounds*, which ultimately cost Capitol Records an exorbitant \$70,000 to create.⁴⁶⁴ Similarly, the Beatles took approximately 300 hours of studio time to produce *Revolver*.⁴⁶⁵ Their next album, *Sgt. Pepper's Lonely Hearts Club Band*, took close to 700 studio hours to finish.⁴⁶⁶ Indeed, many groups would subsequently follow the lead of these artists and leverage their commercial success for greater time and creative control in the studio.

By the mid-Sixties, the production of music in the studio was increasingly being recognized as an art unto itself. Technological advances in tape recorders, multi-tracking, synthesizers, and other pieces of sound equipment had opened up a new world of possibilities. Moreover, the increased availability of high-fidelity stereo equipment enabled consumers to better appreciate production values at home. For these reasons, artists increasingly desired to realize their music in permanent, detailed sonic artifacts. The rise of the art of music production also marked a shift in the perceived purpose and aesthetic ideals of the studio. Early sound recording technology was conceptualized as a

⁴⁶³ Continuum Encyclopedia of Popular Music of the World: Volume 11, 153; See Kent Hartman, *The Wrecking Crew: The Inside Story of Rock and Roll's Best-Kept Secret* (New York, NY: St. Martin's Press, 2012), 99.

⁴⁶⁴ Approximately \$505,000 in 2014 United States Dollars.

⁴⁶⁵ Scott Plagenhoef, "The Beatles - Revolver," *Pitchfork* (September 9, 2009), <http://pitchfork.com/reviews/albums/13434-revolver/>.

⁴⁶⁶ Rodriguez, *Revolver: How the Beatles Re-Imagined Rock 'N' Roll*, 82.

means of capturing live sounds—including music. Prior to the Sixties, a considerable amount of effort had been devoted to advancing recording technologies so that they could capture and reproduce the sound of live musical performances with greater accuracy. In other words, sound engineers strove to produce recordings that were as *realistic* as possible. Over time, some listeners developed a fondness for certain characteristics of early sound recordings, and these distinctive features soon evolved into a new set of aesthetic ideals for recorded sound. An early example of this process involved the sound of the R&B and rock n' roll records produced by the Sun and Chess labels in the Fifties. Many of the records released by these labels were hastily created on primitive equipment and arguably featured poor sound quality. Many artists in the Sixties who had grown up listening to these records, however, had an affinity for the distinctive quality of their sound.⁴⁶⁷ By the early 1960s, many records were produced with large amounts of reverb, echo, and other effects that clearly distinguished their sound from that of live performance. Furthermore, as recording technology advanced over the decade—enabling more accurate representation of live performance—most artists and producers used these new capabilities to create tracks that were even farther removed from the stage. In this way, the perceived function of the recording studio shifted in the Sixties from a means of capturing live performance to a means of creating new, inventive sounds. This shift from *realistic* to the *surrealistic* expression in the studio was central to the creation of

⁴⁶⁷ Richard Buskin, "Sam Phillips: Sun Records," *Sound on Sound* (October 2003), <http://www.soundonsound.com/sos/oct03/articles/samphillips.htm>; Rick Kennedy and Randy McNutt, *Little Labels--Big Sound: Small Record Companies and the Rise of American Music* (Bloomington, IN: Indiana University Press, 1999), 104; A similar process has taken place with the sound of tube-based amplifiers and vinyl records.

psychedelic music, and was a powerful means through which artists sought to both enhance and emulate the experience of psychedelic drugs.

Noteworthy Developments on the East Coast

While this dissertation focuses primarily on developments that occurred in California and the Southwest, there were two bands on the East Coast that were active in the fall and winter of 1966 that should be briefly mentioned.

The first is a band called the Deep, which released an album entitled *Psychedelic Moods* in October of 1966. The album was the idea of Rusty Evans, a New York musician and artist who wanted to create the first psychedelic album. Back in the summer of 1966, he approached producer and songwriter Mark Barkan with his idea, and the pair set out to realize the vision. Evans subsequently experimented with LSD to gain inspiration for the album, though Barkan abstained. The pair then recruited a lyricist and several other musicians who had experimented with LSD to help create the album.⁴⁶⁸

Describing his intent in creating the record, Barkan stated:

I wanted guys who knew the experience [LSD] so I could tap into what they went through. I decided we're going to make this whole album like an LSD experience.⁴⁶⁹

The album was picked up by Cameo-Parkway Records and recorded on a tight budget over four days in Philadelphia.⁴⁷⁰ The album employs a diverse range of sounds—

⁴⁶⁸ Rose Benes, "The First 'Psychedelic' Album Ever," *Esquire* (March 12, 2014), <http://www.esquire.com/blogs/culture/the-deep-psychedelic-moods>.

⁴⁶⁹ Ibid.

⁴⁷⁰ Ibid.

timpani, xylophone, bells, flute, piano glissandi, baby sounds, animal-like noises—that were treated with various effects in the studio. Barkan even recorded Evans and his girlfriend having sex behind a curtain for background noise on “Rain is Black.”⁴⁷¹ The album lyrics are also innovative, often employing long strings of adjectives or descriptive phrases that do not form any kind of narrative. While the tracks on *Psychedelic Moods* feature some interesting sounds, the musical material that provides the backdrop for these tricks is some very unremarkable rock n’ roll. Indeed, the album was created in haste; half of the songs on the album were written during the car ride from New York City to the studio in Philadelphia. Moreover, the whole album was recorded by a group of musicians who were quickly assembled for the sole purpose of producing it.⁴⁷² The failure of *Psychedelic Moods* to incorporate its surrealistic sounds into the underlying music causes many of the tracks to sound “gimmicky” in contrast to its peers.

Psychedelic Moods sold very poorly. The Cameo-Parkway label did not release any singles or promotions, and seemingly did not know how to market the record.⁴⁷³ The album and the band have remained relatively obscure ever since and are often omitted from the cannon of early psychedelic albums. The *Psychedelic Moods* does, however, seem to be the first *album* to explicitly declare itself “psychedelic” and credit psychedelic drugs for its inspiration—beating the Elevators’ *Psychedelic Sounds* to this precedent by a matter of weeks.

⁴⁷¹ Ibid.

⁴⁷² Ibid.

⁴⁷³ Ibid.

The second band is the Blue Magoos, who came out of the Greenwich Village scene in 1966. The group consisted of Ralph Scala (keyboards/vocals), Emil “Peppy” Theilhelm (guitar), and Geoff Daking (drums). The band was known for their sophisticated grooming, which included hair styled by Christopher Pluck at Vidal Sassoon and exotic clothing created by Diana Dew.⁴⁷⁴ Little has been written, however, about the exact nature of the band’s relationship with psychedelic drugs.

In December of 1966, the group released their debut album *Psychedelic Lollipop* on the Mercury label. In contrast to the Deep, the Blue Magoos were an established group with a seasoned roster of songs and their own distinct sound. The tracks on *Psychedelic Lollipop* borrow from the sound of rock n’ roll and electric blues, but are embellished with florid lead guitar licks, melodic bass lines, and a prominent electric organ—prominent features of the psychedelic music that was being played on the West Coast . Many of the songs are also structured with creative forms that freely incorporate sections of extended improvisation. It is, however, the band’s cover of J.D. Loudermilk’s “Tobacco Road,” with its long and innovative instrumental jam, that best represents the Blue Magoos’ contribution to psychedelic music in this period. The album’s production has a gritty, raw aesthetic that is similar in many respects to the sound of many of the early Rolling Stone’s albums. While less polished than the sound of albums being released by many West Coast bands, the production value was a fitting aesthetic for the band’s music, which was slightly rough around the edges.

⁴⁷⁴ Lillian Roxon, “Blue Magoos,” in *Rock Encyclopedia* (New York, NY: Workman's Publishing Company, 1969), 55.

The album was commercially successful. Its single “We Ain’t Got Nothing Yet / Gotta Get Away” stayed on the Billboard charts for 14 weeks and peaked at the number five spot on the American charts early in January of 1967. The album itself peaked at number 21 on the American charts.⁴⁷⁵ The success of *Psychedelic Lollipop* is especially notable given that it occurred before psychedelic music was at the height of its popularity.

Consolidation and Dissemination of the Psychedelic Sound

In late 1966, several important psychedelic albums were released that had a definitive impact on the genre. Some of these albums are significant because they were among the first to climb the Billboard charts and become household names. Others had less commercial success but were influential records that consolidated aspects of the musical language that would become permanent facets of the “psychedelic sound”.

The Psychedelic Sounds of the 13th Floor Elevators (November 1966)

In June of 1966, the Elevators signed a new record deal with a label called “International Artists,” that included a new distribution deal for a single of “You’re Gonna Miss Me” that they had recorded with a local label. The record company assigned

⁴⁷⁵ Peter Buckley, *The Rough Guide to Rock*, 3rd ed. (New York, NY: Penguin Group, 2003), 113.

Lelan Rogers, the brother of country star Kenny Rogers, to manage the group and help keep them out of trouble.⁴⁷⁶ The band also parted ways with Benny Thurman whose addiction to amphetamines had become out of control. Thurman was replaced on bass by a friend of Sutherland and Walton from their hometown of Kerrville named Ronnie Leatherman. In August of 1966, the 13th Floor Elevators went to San Francisco to play at the Avalon Ballroom, which was being run by fellow Texan Chet Helms. The trip to California was, in part, an effort to distance themselves from drug-related charges that they faced back in Texas. The Elevators received a lukewarm reception in San Francisco, however. As outsiders in the Bay Area, the group did not look or act like the local California hippies. Moreover, many audiences seemed to dislike the fact that the Elevators played in traditional sets and found the formidable intensity of the band's volume and expression to be off-putting.⁴⁷⁷ Paul Drummond also argues that the band would have had a greater chance of being picked up by a major label had they arrived in San Francisco several months later when record companies were desperate to sign psychedelic groups.⁴⁷⁸

In the fall of 1966, the Elevators were twice featured on national television performing "You're Gonna Miss Me" for Dick Clark; first on the September 26 airing of *Where the Action Is*, and subsequently on the October 29 airing of *American Band Stand*'s Halloween special.⁴⁷⁹ They also made two trips back to Texas to record their first

⁴⁷⁶ Drummond, *Eye Mind: The Saga of Roky Erickson and the 13th Floor Elevators*, 136.

⁴⁷⁷ *Ibid.*, 157.

⁴⁷⁸ *Ibid.*, 201.

⁴⁷⁹ *Ibid.*, 166, 93.

LP with International Artists. The album, entitled *The Psychedelic Sounds of the 13th Floor Elevators* was recorded over two sessions—one in Houston, the other in Dallas—and released in November of 1966.⁴⁸⁰ The record was among the first *albums* to declare itself “psychedelic.” More importantly, the LP’s liner notes—written by Tommy Hall—clearly articulate the inspirational role of psychedelic drugs on the album’s music.⁴⁸¹

Recently, it has become possible for man to chemically alter his mental state and thus alter his point of view (that is, his own basic relation with the outside world which determines how he stores his information). He can restructure his thinking and change his language so that his thoughts bear more relation to his life and his problems, therefore approaching them more sanely. It is this quest for pure sanity that forms the basis of the songs on this album.⁴⁸²

The album was recorded very quickly, and every band member but Walton reportedly took psychedelics for the studio sessions.⁴⁸³ Unfortunately, the finished record had a poor production value and a “muddy” sound. This was probably due, in part, to the fact that International Artists was a very meager label despite its grandiose name. Moreover, the engineer who conducted the sessions remembers the Elevators playing incredibly loudly, which may have reduced the quality of the recording.⁴⁸⁴ Nevertheless, the album contains many distinctive rock songs, which are imbued with an intensity that “makes you see things if you want to,” in the words of Roky Erickson.⁴⁸⁵ The album is also notable for its use of musical onomatopoeia: “Roller Coaster” careers like a ride at an amusement park;

⁴⁸⁰ Ibid., 165-78.

⁴⁸¹ Ibid., 186. The band reportedly took DMT for the Houston session, and LSD for the session in Dallas (Drummond 165, 178).

⁴⁸² 13th Floor Elevators, *Psychedelic Sounds of the 13th Floor Elevators* (International Artists LP1, 1966).

⁴⁸³ Drummond, *Eye Mind: The Saga of Roky Erickson and the 13th Floor Elevators*, 178.

⁴⁸⁴ Ibid., 180.

⁴⁸⁵ DeRogatis, *Turn on Your Mind: Four Decades of Great Psychedelic Rock*, 71.

“Reverberation (Doubt)” is saturated with reverb; “Splash 1” creates waves like those in a body of water; and “Fire Engine,” a song about the psychedelic drug dimethyltryptamine (DMT), is filled with the immediacy of droning sirens.⁴⁸⁶ Without permission from the band, the label drastically changed the order of songs on the album and put “You’re Gonna Miss Me” as the first track.⁴⁸⁷ The album’s lyrics, mostly written by Hall, are often very dense and describe visions and revelations. For example, Hall’s song “Thru the Rhythm” opens:

Through the rhythm of darkened time
Painted black by knowledge crimes
And repetitions pointless mine
Instilling values the sick define
That weaves the fabric that keeps you blind
And ties your hands and cloaks your mind
But on my stilts I’m above slime
Come on up if you can make the climb but whoever.⁴⁸⁸

Three of the songs on the Elevators’ album, “You Don’t Know,” “Monkey Island,” and “Kingdom of Heaven,” were written by local Austin songwriter Powell St. John, whom Hall greatly admired. “Kingdom of Heaven” in particular was a perfect fit into Sutherland and Erickson’s distinctive quasi-religious understanding of the psychedelic experience:

Here you are at my place within your glistening eyes
I’m watching your reactions as the thing within you cries
And I’m bringing you this message ‘cause I think it’s time you knew
That the kingdom of heaven is within you.⁴⁸⁹

⁴⁸⁶ Drummond, *Eye Mind: The Saga of Roky Erickson and the 13th Floor Elevators*, 171.

⁴⁸⁷ Ibid., 192.

⁴⁸⁸ 13th Floor Elevators, *Psychedelic Sounds of the 13th Floor Elevators* (Houston, TX: International Artists LP1, 1966).

⁴⁸⁹ Ibid.

Erickson clearly struggles with the density of Hall and St. John's prose, which was ill-suited for the style of energetic singing he had mastered.

The Psychedelic Sounds of the 13th Floor Elevators and its singles failed to take off on the charts.⁴⁹⁰ The album lacked popular appeal in many respects, and the band did not have the kind of grassroots support that sustained many of the San Francisco psychedelic bands in their early days. The album was also poorly promoted by International Artists.⁴⁹¹ Furthermore, its content had little in common with "You're Gonna Miss Me," the song the label put the most effort into promoting.

The band came home from San Francisco for Christmas and never made it back to California despite their intentions to return. From 1967 onward, the band and its members slowly digressed, but managed to produce two more albums: *Easter Everywhere* (1967) and *Bull of the Woods* (1969), the latter consisting primarily of Stacy Sutherland songs with only minor participation from Erickson and Hall. In October of 1969, a jury declared Erickson to be an insane schizophrenic and he was incarcerated indefinitely at the Rusk Maximum Security Prison for the Criminally Insane where he was subjected to electroconvulsive therapy and Thorazine treatments before finally being released in 1972.⁴⁹²

⁴⁹⁰ Drummond, *Eye Mind: The Saga of Roky Erickson and the 13th Floor Elevators*, 198, 215.

⁴⁹¹ Ibid., 215.

⁴⁹² Ibid., 364.

The Doors (January 1967)

In January of 1967, a new psychedelic band from Los Angeles called the Doors released their self-titled debut album.⁴⁹³ The Doors had little to no association with the psychedelic scene that had developed in San Francisco and drew their artistic inspiration from very different sources. Nevertheless, they are an important part of the history of psychedelic music.

The band's charismatic singer and frontman, Jim Morrison, was the prodigal son of a Navy Admiral. He considered himself a poet and used the band's music as his vehicle for performing his work. As a teenager, Morrison developed a love affair with the writings of Nietzsche, Rimbaud, and the Beat Generation.⁴⁹⁴ He became obsessed with notions of self-realization and social control, and grew into a defiant, nihilistic, and indulgent young man who his friend and fellow poet, Michael McClure, once described as "a glutton for experience."⁴⁹⁵ The other members of the band—Ray Manzarek (keyboards), Robby Krieger (guitar), and John Densmore (drums)—were very interested in Eastern culture and music, and first met each other at a Transcendental Meditation lecture.⁴⁹⁶ Hence in contrast to the "fey" hippies in San Francisco who were playfully chasing their fantasies of the Wild West, the Doors were on a more serious and philosophical quest for truth and fulfillment, which was more of a continuation of Beat counterculture than a break from it.

⁴⁹³ The Doors, *The Doors* (New York, NY: Elektra EKS-74007, LP, 1967).

⁴⁹⁴ Stephen Davis, *Jim Morrison: Life, Death, Legend* (New York, NY: Gotham, 2005), 21.

⁴⁹⁵ *Ibid.*, 336.

⁴⁹⁶ *Ibid.*, 46. John Densmore had previously been a member of a short-lived Los Angeles band called the Psychedelic Rangers.

The band was formed after a chance meeting between Morrison and Manzarek on Venice Beach in the summer of 1965. The band's name was suggested by Morrison and drawn from the title of Aldous Huxley's seminal psychedelic essay *The Doors of Perception*.⁴⁹⁷ Notably, the band's principal focus was not psychedelic drugs. Its members enjoyed marijuana and experimented with LSD, but arguably appreciated psychedelic drugs as one of many paths to enlightenment, and not the basis for a belief system.⁴⁹⁸ The band soon began playing venues on the Sunset Strip and was eventually signed to a record deal with Elektra Records.

Their first album, *The Doors*, was a unique blend of musical elements borrowed from rock, jazz, and Indian classical music. The catalyst of this fusion was Manzarek's Vox organ. Manzarek has the ability to effectively play in various idioms, weaving together organ lines that incorporated the sound of electric blues, Indian harmonium drones, and even baroque polyphony. Manzarek also provided the band's eclectic bass lines on a Fender Rhodes keyboard bass, which he played with his left hand.⁴⁹⁹ The fullness of the texture created by Manzarek's organ parts allowed the group to effectively play without a rhythm guitarist, and gave Krieger considerable freedom as lead guitarist. Krieger had studied the sitar and sarod at Ravi Shankar's Kinnara Music School and played the guitar with a very distinct style that is notable both for its flexibility, minimalism, and iterative approach to developing a melody. Densmore's drumming was

⁴⁹⁷ Ibid., 81.

⁴⁹⁸ Ibid., 81, 86, 141.

⁴⁹⁹ Ibid., 94.

equally versatile and could infuse the band's sound with jazz-inspired grooves, or provide a more free and expressive accompaniment.

Overshadowing this superb instrumental music was often Jim Morrison's powerful vocal performances. As a teenager, Morrison liked to listen to hell-fire preachers on AM radio and enjoyed imitating their declamation.⁵⁰⁰ As a singer, Morrison would borrow their practice of embellishing speech with variations in speed, tone, and cadence to imbue his lyrics with nuanced sentiments. This was especially true in live performance, where the Doors put considerable effort into creating a liminal environment for their long passages of improvised music and speech. For Morrison, the concerts were a unique opportunity to experiment with his theories of social control. He enjoyed building and releasing tension within the audience through his theatrical speeches and shamanistic stunts—sometimes with the intent of causing unrest.⁵⁰¹

The lyrics Morrison wrote for the songs on the band's debut album were a striking articulation of a nihilistic lust for pleasure and experience. Expressing this sentiment succinctly in "Light My Fire," he sings:

The time to hesitate is through
No time to wallow in the mire
Try now we can only lose
And our love become a funeral pyre

Come on baby, light my fire
Come on baby, light my fire

⁵⁰⁰ Ibid., 20.

⁵⁰¹ Ibid., 100, 21, 252.

Try to set the night on fire.⁵⁰²

Moreover, the lyrics for the opening track of the album, “Break On Through,” make reference to drugs in the middle of the song when Morrison screams “she gets high” several times in his usual impassioned manner.

The album was a huge success for Elektra. It spent a total of 121 weeks on the Billboard 200, and peaked at number two on the charts. The “Light My Fire / Crystal Ship” single was especially successful, holding onto the number one spot for three weeks.⁵⁰³ Indeed, *The Doors* contained a truly unique sound that had very little precedent and was notable for achieving its surreal quality not through studio effects, but rather a tasteful incorporation of eclectic styles that sounded otherworldly to many listeners.

As previously stated, the Doors were a very different band than the psychedelic groups in the Bay Area. Whereas many of the San Francisco bands propagated an imaginative impetus for using psychedelic drugs, the Doors embraced an indulgent one that focused on liberating one’s consciousness from societal norms. In this way, the Doors and the sentiments of their music shared much in common with Timothy Leary’s “turn on, tune in, drop out” psychedelic philosophy, which encouraged individuals to seek enlightenment by freeing their consciousness from the yoke of authority.

⁵⁰² The Doors, *The Doors* (New York, NY: Elektra EKS-74007, LP, 1967).

⁵⁰³ Keith Caulfield, “The Doors: A Billboard Chart History,” *Billboard* (May 21, 2013), <http://www.billboard.com/articles/columns/chart-beat/1563045/the-doors-a-billboard-chart-history>.

Surrealistic Pillow (February 1967)

After Jefferson Airplane released their first album, *Jefferson Airplane Takes Off*, several changes occurred in the band's lineup. Skip Spence unexpectedly went to Mexico, prompting the band to hire a Los Angeles musician named Spencer Dryden to replace him on drums. Dryden was a seasoned performer from New York City, who had a lot of experience playing rock and blues though his true love was jazz music.⁵⁰⁴ In September of 1966, Grace Slick of the Great Society left her band to join Jefferson Airplane and replace Signe Toly. The Great Society subsequently dissolved, and Darby left for India to study with Ali Akbar Khan.⁵⁰⁵

The new lineup was an odd mix of personalities and musical interests with jazz—not rock—being the one genre that interested them all. The group was also united by their collective affinity for drugs. Most of the band members were very fond of marijuana, and Slick, Balin, and Kantner had all experimented with LSD, though Grace's substance of choice was alcohol.⁵⁰⁶ Describing the band's relationship with LSD, Paul Kantner stated: "acid for us was just a tool rather than a religion, like a good dessert after a fine eight-course meal. It was as good as several other tools."⁵⁰⁷ Jorma Kaukonen and Jack Casady developed a special synergy that led to interesting counterpoint between their respective lead and bass guitars lines. Spencer Dryden's background in jazz provided the band with a versatile drummer who could tastefully accompany their eclectic mix of songs. Kantner

⁵⁰⁴ Tamarkin, *Got a Revolution: The Turbulent Flight of Jefferson Airplane*, 68-71.

⁵⁰⁵ Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound*, 114.

⁵⁰⁶ Tamarkin, *Got a Revolution: The Turbulent Flight of Jefferson Airplane*, 19, 37, 96.

⁵⁰⁷ *Ibid.*, 20.

and Balin continued to write songs individually and with the other band members, though the latter became alienated from the group over time as it veered towards more experimental music. Moreover, Balin's presence and vocal prowess became overshadowed by the powerful voice and domineering charisma of Grace Slick.⁵⁰⁸

Jefferson Airplane released four more albums in the 1960s. The band's second album, *Surrealistic Pillow*, was released in February of 1967 and contained two Great Society songs that Grace Slick brought with her: "Somebody to Love" and "White Rabbit," both of which were released as singles. The Jefferson Airplane version of "Somebody to Love" was a more virtuosic arrangement of the song than that of the Great Society. The band played the song at a faster tempo than the original, which enabled Grace to sing it with even more vigor and charisma. The song also featured some ornate accompaniment by Cassady and Kaukonen, which culminated with a passage of virtuosic polyphony at the very end of the track. The band's cover of "White Rabbit" did not feature the long improvised introduction that occurred on the previously discussed live performance by the Great Society. Instead, it is a short, carefully choreographed song that slowly builds over 2' 30" to Grace screaming her famous line "Feed your head." The other songs on the album are a mix of rock and folk-rock influences, with a few mellow sentimental songs, "Today" and "Comin' Back to Me," which are sung by Balin.

Surrealistic Pillow is considered a quintessential psychedelic album for many reasons, one of which is the timing of its release shortly before the media frenzy that enveloped the San Francisco counterculture scene in the spring of 1967. Kaukonen's lead

⁵⁰⁸ Ibid., 136.

guitar work on songs like “Somebody to Love” and “Plastic Fantastic Lover” are good examples of the kind of blues-inspired psychedelic guitar licks that centered on long string bends and other means of *glissandi*.⁵⁰⁹ The album also contained several textual references to drugs. Grace Slick’s “White Rabbit,” while inspired by Lewis Carroll, was nevertheless received by many as an ode to psychedelic drugs. The title of Paul Kantner’s song “D. C. B. A – 25” combined the song’s chord progression with the synthesis number of Hofmann’s discovery (LSD-25).⁵¹⁰ The lyrics of the song are about a breakup, yet contain several lines that seem to refer to drug use:

Here in crystal chandelier, I’m home
too many days, I’ve left unstoned
if you don’t mind happiness
purple-pleasure fields in the Sun
ah, don’t you know I’m runnin’ home
don’t you know I’m runnin’ home
to a place to you unknown.⁵¹¹

The album was very successful, peaking at number three on the U.S. Billboard charts, and “White Rabbit” and “Somebody to Love” continue to be some of the most well-recognized hits from the San Francisco psychedelic music scene.⁵¹²

⁵⁰⁹ This style of playing was also featured in the psychedelic solos of Jimi Hendrix and Eric Clapton.

⁵¹⁰ Ibid., 118.

⁵¹¹ Jefferson Airplane, *Surrealistic Pillow* (New York, NY: RCA Victor LSP-3766, LP, 1967).

⁵¹² Irvin, *The Mojo Collection: The Greatest Albums of All Time*, 95.

The Grateful Dead (March 1967)

The Grateful Dead continued to play live shows until the release of their first single in June of 1966 with Scorpio Records.⁵¹³ It consisted of electrified versions of two traditional blues songs “Stealin’” and “Don’t Ease Me In,” the former having been popularized by the Memphis Jug Band in 1928.

In September of 1966, the Dead signed a record deal with Warner Brothers with the help of Tom Donahue, who was a proponent of the band’s music.⁵¹⁴ The band’s self-titled debut album was released in March of 1967.⁵¹⁵ The album featured electric covers of classic blues songs by artists such as Jesse Fuller, Sonny Boy Williamson, and Obray Ramsy, which were infused with elements of rock n’ roll and surf rock. The album also contained a cover of Bonnie Dobson’s folk song “Morning Dew,” which Garcia had first encountered on a 1966 record by Fred Neil.⁵¹⁶ The album also contained two original songs: “The Golden Road (To Unlimited Devotion),” a collaborative rock piece written by the band, and “Cream Puff War,” which was written by Garcia. “The Golden Road” celebrated the kind of carefree lifestyle the Dead were essentially living at that point:

See that girl, barefootin’ along
Whistlin’ and singin’, she’s a carryin’ on
There’s laughing in her eyes, dancing in her feet
She’s a neon-light diamond and she can live on the street

Hey, hey, come right away
Come and join the party every day.⁵¹⁷

⁵¹³ The Grateful Dead, *Stealin’ / Don’t Ease Me In* (San Francisco, CA: Scorpio Records 201, Single, 1966).

⁵¹⁴ McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 71-73.

⁵¹⁵ The Grateful Dead, *The Grateful Dead* (Los Angeles, CA: Warner Bros. WS 1689, LP, 1967).

⁵¹⁶ *Ibid.*, 539.

⁵¹⁷ The Grateful Dead, *The Grateful Dead*

The song opens with a crescendo featuring the organ and lead guitar that increases in volume to the point that the sound begins to distort from the clipping signals—an effect that continues to be applied to the lead guitar throughout the song. The chorus features a staggered antiphonal texture between the vocalists that adds interest to its text. Garcia’s “Cream Puff War” has a surf rock sound that is embodied by its driving bass line and Garcia’s frenzied and energetic lead guitar playing, which may have been partly influenced by him being on the stimulant Ritalin.⁵¹⁸ Notably, the Dead are not known to have been admirers of surf music, yet several songs on their first album contain musical features that seem to point to the genre.⁵¹⁹

The Grateful Dead was not a commercial success.⁵²⁰ Moreover, it was a poor indicator of the group’s future musical direction. Being the band’s first album, they largely obliged the wishes of Warner Brother’s veteran producer Dave Hassinger.⁵²¹ Over the course of the Sixties, the band would slowly move away from traditional rock and blues, and develop their own eclectic musical language that owed more to folk and jazz music. While the Dead would create some experimental studio albums, such as *Aoxomoxoa* (1969) and *Mars Hotel* (1974), they differ from many other psychedelic bands in that much of their music does not rely on a surreal aesthetic. The band often played with relatively clean tones on their electric instruments and were loved for their

⁵¹⁸ McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 181.

⁵¹⁹ It is possible that Garcia and other band members absorbed these elements from surf-influenced music being played at Go-Go clubs in the North Beach neighborhood of San Francisco. Songs like Bobby Freeman’s “C’Mon and Swim” suggests that the music at clubs like The Condor may have been an interesting intersection of styles.

⁵²⁰ “The Grateful Dead (Album),” *The Grateful Dead Discography*, http://www.deaddisc.com/disc/Grateful_Dead_1st.htm. Accessed October 21, 2015.

⁵²¹ ———, *A Long Strange Trip: The inside History of the Grateful Dead*, 181.

live performances—not their experimental feats in the studio. Nevertheless, the Dead are considered one the foremost psychedelic bands for other reasons. Chief among them, was the band’s ability to play together with an incredible degree of synergy. The essence of this musical intimacy was not the band’s shared knowledge of stylistic and theoretical conventions or aural skills, but the degree to which they understood each other’s creativity and emotional energy. This dynamic was a musical manifestation of *intersubjectivity*, a concept that Kesey and other philosophers believed to be central to understanding the nature of psychedelic experience.⁵²² The band is also considered psychedelic for the Deadhead culture that surrounded it. As previously discussed, the band experimented heavily with LSD in their early days. Moreover, for many years the band’s sound engineer was a young man named Owsley Stanley III who was known throughout the Bay area for producing high-quality LSD.⁵²³ Consequently, psychedelic drugs were part of the Dead subculture from the very beginning. Deadheads who followed the band also lived and functioned in a communal manner, a social dynamic that could be considered emblematic of the feelings of oneness (depersonalization) elicited by psychedelic drugs.⁵²⁴ There is also a certain *je ne sais quoi* that lends the band and its music to the experience of psychedelic drugs. I make this statement in light of the band’s enduring association with psychedelia, but also my own personal experience as someone who was unexpectedly captivated by the gentle, happy, and unaffected energy that flowed from the band’s music while under the influence of a psychedelic drug. Many individuals

⁵²²Wolfe, *The Electric Kool-Aid Acid Test*, 60-61. Intersubjectivity is a concept from psychology that explores shared meaning and experience between minds.

⁵²³ McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 104.

⁵²⁴ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 131.

in the Sixties commented on Jerry Garcia's unique charisma. Describing his first impression of Garcia—and surprising affinity for him—Phil Lesh remarked: “people were just awed by him, sitting at his feet—and I’m the kind of guy who distrusts people like that.”⁵²⁵ Darby Slick remarked that Garcia’s “eyes had sparkles that drugs couldn’t extinguish,” and Jefferson Airplane credited him as the band’s “musical and spiritual adviser” on the back cover of *Surrealistic Pillow*.⁵²⁶ Given that Garcia seems to have been a natural leader of individuals who were known “heads,” it is not surprising that his drug-friendly ethos is embodied in the music of the band he led.

SYNOPSIS OF EARLY PSYCHEDELIC MUSIC

By the spring of 1967, the stage was set for the “Summer of Love” and the media frenzy that surrounded it. Record companies quickly rushed in to sign contracts with San Francisco groups and exploit the new psychedelic sound. Psychedelic music continued to evolve in several directions over the remainder of the decade. Needless to say, the bands covered in this chapter constitute a small number of the many groups that were active on the West Coast during the period I have discussed. They are, however, the groups I believe to be most responsible for creating and spreading the dominant culture and style of psychedelic music. Two additional bands that are commonly mentioned in histories of the San Francisco scene are Moby Grape and Quicksilver Messenger Service. While both

⁵²⁵ McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 39.

⁵²⁶ Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound*, 62; Jefferson Airplane, *Surrealistic Pillow*. Liner notes.

of these bands had followings during the period in question, the elements that defined the style of their early music either did not come to be important facets of the psychedelic sound or were first pioneered by another group discussed in this chapter. Moreover, both groups did not release albums until after the summer of 1967.

The Beatles and other bands belonging to the British Invasion greatly influenced American popular music, but a defining trait of the psychedelic music that emerged on the West Coast was the degree to which its evolution was fuelled by other musical traditions, specifically surf rock and American folk music. These pioneers of West Coast psychedelic music were also inspired by jazz; many did not fundamentally understand its structure, or how to play in its established styles, but they admired the genre's *spirit* of freedom and eclecticism. Moreover, many in the San Francisco scene—both hippies and their Beat predecessors—were focused on exploring notions of a mythical American heritage and distinguishing themselves from Europe and its influences. Indeed, in my research for this chapter, I seldom encountered mention of a psychedelic band covering a Beatles song, though several musicians credit the Beatles with giving them the inspiration to start their own groups.

A distinct feature of many San Francisco psychedelic bands was the manner in which they formed. In several instances, the individuals who comprised these groups had little to no musical training. Jerry Garcia once remarked, “A lot of the early bands were just a collection of friends, some of whom could play instruments, some of whom couldn’t.”⁵²⁷ Despite their lack of skill and experience, these individuals valued their

⁵²⁷ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 84.

musical expressions and were willing to share them. Moreover, there were many in San Francisco who were eager to comprise their audience. San Francisco's openness to dilettantes was arguably the catalyst that made the entire psychedelic music scene possible. I believe this openness may be attributed, in part, to the city's history of individualism as well as its disdain for the commercial cultural products that flowed from Los Angeles. The amateur musicianship of these San Francisco bands resulted in a lot of experimentation, which Craig Morrison aptly terms "naïve innovation" in his dissertation.⁵²⁸ Bands such as the Great Society and Big Brother and the Holding Company are perfect examples of this practice; ignorant of musical conventions, they played around with their instruments until they found sounds that were interesting to their ears. They often paired this activity with drug use, which may explain their proclivity to spend countless hours lost in a jam session, as well as the reason their music was so well received by drug-friendly audiences. Nevertheless, the experimentation of these amateurs resulted in a large amount of unconventional music being played on stage in the Bay Area.

While it is difficult to define a psychedelic "style," use of the minor mode, long solo passages, melodic bass lines, and the presence of a keyboard instrument were musical features that occurred with some prevalence. The lead guitar work in psychedelic songs also tended to be quite adventurous, employing manic string bends, alternative scales, electronic sound effects, and unorthodox playing techniques. Above all, most

⁵²⁸ Craig Morrison, "Psychedelic Music in San Francisco: Style, Context, and Evolution" (PhD diss., Concordia, 2000), 104.

psychedelic songs had some aesthetic feature that gave them a surreal sound. Bands such as Big Brother and the Holding Company used their equipment to this end, toying with amplifiers, effects pedals, and various techniques to force unusual sounds out of their instruments, whereas artists like Brian Wilson relied on studio production techniques to embellish their music. Bands like the Doors and the Great Society achieved a surreal aesthetic by defying musical conventions and incorporating exotic sounds borrowed from the musical traditions of other cultures. Indeed, the mixing and matching of disparate musical styles—either consciously or through naïve innovation—was a key feature of the psychedelic sound. Describing the affinity that San Francisco bands had for such practices in the August 1967 issue of the *Mojo Navigator* rock magazine, a journalist wrote:

If there is one thing which links together the San Francisco groups it is not a specific or definable sound to which they all cling, but rather a common approach to music, a common style of digging and responding to music. There is only one generalization that can be made about the top San Francisco bands and that is that, regardless of any one group's featured style (say the Dead's special proclivity with blues, or Country Joe's affinity for the koto music of Japan), they all listen to a wide variety of different kinds of music from all over the world, they all listen to each other, and they all try to constantly incorporate fresh ideas gathered from their listening into the music [...] San Francisco bands have most effectively demonstrated that different styles of music can blend and co-exist with each other.⁵²⁹

In examining the interesting commonalities in sound that run through these subgenres of psychedelic music, it is important not to ignore the powerful counterculture

⁵²⁹ Greg Shaw and David Harris, *Mojo Navigator*, August 1967, 5.

movements that coalesced around this music. Few bands are a better argument for this caveat than the Grateful Dead. Though many consider the Dead to be one of the greatest psychedelic groups in history, much of the band's music was a pleasant blend of blues, bluegrass, and rock n' roll, which did not sound surreal or otherworldly. Nevertheless, they played with considerable freedom and synergy, such that performances of their music embodied the core emotional and social experiences of psychedelic drugs, and served as a means of gathering those who sought to live by them.

CHAPTER 3

EFFECTS OF PSYCHEDELIC DRUGS ON CREATIVITY AND THE EXPERIENCE OF SOUND AND MUSIC

UNDERSTANDING THE PSYCHEDELIC DRUGS OF THE SIXTIES

The following chapter explores various theories concerning the ways in which psychedelic drugs affect the experience of sound, music, and the creative process.

Research concerning these topics is admittedly sparse. This is, in part, due to the fact that the political campaign against psychedelic drugs in the late Sixties succeeded not only in prohibiting their recreational usage, but also in inhibiting their use in human research studies.⁵³⁰ Moreover, the desire to understand the experience of music and tenets of creativity in relation to these drugs lacked the medical impetus of questions that pertained to diseases and were seldom the focus of research. Nevertheless, this chapter aggregates information from the few studies that have explored questions related to these subjects. I will also discuss the results of a self-report study I conducted concerning individuals' experience of music while under the influence of marijuana.

People experimented with a wide variety of popular psychedelic substances in the Sixties: marijuana, LSD, psilocybin, DMT, mescaline, and others. Today, the list of known psychedelic drugs is quite long, though many remain obscure and inaccessible to the average recreational user. Nevertheless, most psychedelic drugs fall into one of four families:

- (1) **Serotonergic:** These substances are similar in chemical structure to serotonin and bind themselves to serotonin receptors in the brain to produce their effects. The most popular serotonergic substances are notable for their ability to dissolve one's sense of self, inducing feelings of "connectedness," and

⁵³⁰ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 11. See also the discussion of at the beginning of Jörg Fachner, "Topographic EEG Changes Accompanying Cannabis-Induced Alteration of Music Perception—Cannabis as a Hearing Aid?," *Journal of Cannabis Therapeutics* 2, no. 2 (2002).

producing a variety of sensory effects.⁵³¹

- (2) **Cannabinoid:** These psychedelics bind themselves to special cannabinoid receptors and commonly elicit euphoria and relaxation, among other effects.⁵³²
- (3) **Dissociative:** These drugs inhibit the function of special NMDA receptors, which causes a reduction in signals from other areas of the body reaching the conscious part of the brain. They are known for producing feelings of detachment, and are sometimes used as anesthetics in medicine.⁵³³
- (4) **Empathogens:** These drugs cause the brain to be flooded with large amounts of its own serotonin, dopamine, and norepinephrine. They are known for giving the user a surge of energy and creating feelings of love and empathy.⁵³⁴

The latter two families of psychedelics are less relevant to this dissertation than the first two. Dissociative drugs were used recreationally in the Sixties, specifically nitrous oxide (laughing gas) and the common cough suppressant dexamethorphan, but were less popular than other families of psychedelics.⁵³⁵ Empathogen psychedelics, such as methylenedioxy-methamphetamine (MDMA), were around in the Sixties but did not see widespread usage until the 1980s.⁵³⁶ Consequently, this chapter will focus on two drugs from the first two families that were popular in the Sixties: LSD and marijuana. LSD belongs to the serotonergic family. Though chemically different, many users consider its

⁵³¹ Robert M. Julien, *A Primer of Drug Action: A Comprehensive Guide to the Actions, Uses, and Side Effects of Psychoactive Drugs*, 10th ed. (New York, NY: Worth Publishers, 2005), 519.

⁵³² *Ibid.*, 479.

⁵³³ *Ibid.*, 529.

⁵³⁴ *Ibid.*, 517-18.

⁵³⁵ This statement is based on my own observations from reading countless descriptions of drug use in the Sixties. I am unaware of any reliable statistical information concerning the usage of dissociative drugs in this time period.

⁵³⁶ Julie Holland, *Ecstasy: The Complete Guide* (Rochester, VT: Park Street Press, 2001), 12.

effects to be similar in several respects to psilocybin and mescaline.⁵³⁷ Marijuana belongs to the cannabinoid family and is the only drug from that family to receive widespread recreational usage.

LSD

Following its discovery in 1943, Sandoz began mass producing LSD and distributing it to researchers worldwide in 1947 with the hope that a profitable medical application for the drug would be found. For a brief period of about 15 years, researchers were able to conduct LSD studies with very few restrictions. Government entities were largely ambivalent to the substance, with the exception of the U.S. military and CIA, who were eager to explore its potential as a non-lethal weapon, truth serum, and mind-control agent.⁵³⁸ Moreover, these experiments took place prior to the strict regulation of human subject research that came with the *National Research Act* of 1974. This period of open research came to an abrupt halt in 1962 when the U.S. Food and Drug Administration (FDA) began seizing researcher's supplies of the drug. By the end of the Sixties, LSD research had come to a virtual halt, and by 1973 only a small handful of psychiatrists worldwide could successfully gain approval for studies that employed it.⁵³⁹ It was not until 2002 that the FDA showed some willingness to once again permit researchers to explore politically contentious psychedelics, approving a study designed to explore the

⁵³⁷ M. Foster Olive, *Peyote and Mescaline* (New York, NY: Chelsea House, 2007), 48.

⁵³⁸ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 5.

⁵³⁹ *Ibid.*, 6.

use of psilocybin in the treatment of anxiety, depression, and pain associated with late-stage cancer.⁵⁴⁰

Among the researchers who were able to explore LSD prior to government restrictions was a Los Angeles-based psychiatrist named Oscar Janiger. Janiger was fascinated by changes in consciousness and started his own research project in 1954 to examine the effects of LSD after reading Huxley's *Doors of Perception*.⁵⁴¹ Several aspects of this study made it unique among those that were conducted in the period. Participants in the study had their LSD experiences in a comfortable house that Janiger rented for the purpose of the experiments. This was in contrast to the white hospital rooms that were commonly used by other researchers for their experiments. The study was also quite large, administering LSD to more than 930 people from a wide variety of demographics—many of whom knew little to nothing about LSD prior to their participation.⁵⁴² Janiger's research is very valuable due to his special fascination with LSD's effect on artists and the creative process. In all, Janiger administered LSD to 118 participants who were musicians, artists, actors, writers, and media people, permitting them to freely create or appreciate their respective art forms during their sessions.⁵⁴³

Janiger's study ran for approximately eight years. As it progressed, the structure of Janiger's study slowly fell into disarray as the analysis methods established in its early

⁵⁴⁰ Marlene Dobkin de Rios and Oscar Janiger, *LSD, Spirituality, and the Creative Process* (Rochester, VT: Park Street Press, 2003), 4.

⁵⁴¹ *Ibid.*, 15.

⁵⁴² *Ibid.*, 1, 18.

⁵⁴³ *Ibid.*, 28.

days struggled to cope with the volume and variety of data being provided by subjects.⁵⁴⁴ As a result, Janiger did not publish any findings over the course of the study, which resulted in him becoming somewhat of a pariah in the local community of psychiatrists.⁵⁴⁵ In 1962, his study was among several that were targeted by the FDA, and Janiger was forced to relinquish his supply of LSD or risk losing his license.⁵⁴⁶ In the decades that followed, most of his work remained unknown until Marlene Dobkin de Rios published significant portions of it in 2003.⁵⁴⁷ Due to poor recordkeeping, apparent shifts in methodology, and non-utilitarian pursuits, Janiger's work was seemingly of little use to the scientific community. Nevertheless, the detailed and diverse accounts given by subjects who participated in the study are very valuable to anyone seeking to understand LSD's subjective effects.

Another forum of music-related LSD research was the field of music therapy. In the early 1970s, a handful of psychiatrists began incorporating music into psychotherapy sessions being performed on LSD. In some instances, the music was intended to aid in the administration of verbal psychotherapy; in others, the music itself was the treatment. An important instance of the latter methodology was a study conducted at the Maryland Psychiatric Research Center by Helen Bonny and Walter Pahkne.⁵⁴⁸ This study combined music therapy with a form of LSD therapy pioneered by Pahkne called "psychedelic peak

⁵⁴⁴ Ibid., 32.

⁵⁴⁵ Ibid., 25.

⁵⁴⁶ Ibid., 2.

⁵⁴⁷ Ibid., 1.

⁵⁴⁸ For an example of the former type of study see Charles T Eagle, "Music and LSD: An Empirical Study," *Journal of Music Therapy* 9, no. Spring (1972).

psychotherapy,” which sought to use high dosages of LSD to induce therapeutic transcendental experiences for patients who suffered from various forms of addiction and psychological stress related to terminal cancer.⁵⁴⁹ In all, the study administered over 600 LSD sessions to patients at the hospital.⁵⁵⁰ The study prescribed specific pieces of music for different states of the LSD experience. The session culminated with the “peak” phase of psychedelic experience at which point the subject’s mind was considered ready for treatment with “maximal music,” which according to the therapists involved constituted specific portions of Gounod’s *St Cecilia Mass*, Strauss’s *Death and Transfiguration*, Fauré’s *Requiem*, Barber’s *Adagio* for strings, and Brahms’s *German Requiem*, in addition to select hymns and anthems.⁵⁵¹ The study seemed to rest on the assumption that certain pieces of music had a universal effect on the human mind. Moreover, its published findings did not acknowledge the subjective nature of LSD experiences or give any statistics to support the efficacy of its treatments. Nevertheless, it contains some interesting statements from patients who experienced music while under the influence of LSD in a controlled setting.

Unfortunately, the published findings of the studies discussed in this chapter seldom give precise statistical information on the prevalence of the effects they describe. Many seem to have conceptualized their research to be exploratory in nature and were

⁵⁴⁹ Helen L. Bonny and Walter Pahnke, N., “The Use of Music in Psychedelic (LSD) Psychotherapy,” *Journal of Music Therapy* 9, no. Summer (1972): 64.

⁵⁵⁰ *Ibid.*: 65.

⁵⁵¹ *Ibid.*: 80.

arguably focused on identifying the boundaries of the drug's subjective experiences—instead of precisely measuring them. It is therefore sometimes difficult to be certain if an effect was considered notable by an author due to its prevalence or spectacular nature.⁵⁵² It is also important to note that after two decades of LSD research many in the scientific community reached the conclusion that it was *impossible* to predict the effects of the drug on an individual. Indeed, part of the reason the U.S. government stopped supporting further LSD research was the belief that the drug could never be reliably employed in therapy or other useful purposes.⁵⁵³ Other researchers have maintained that the drug may be harnessed through the proper screening of individuals, precise dosage, and careful attention to a subject's "set and setting" during the experience.⁵⁵⁴ Still, the extreme subjectivity of LSD's effects is both its greatest wonder and frustration, and the observations and assertions below certainly do not transcend this paradox.

Effects of LSD on the Appreciation of Music

In their comprehensive review of the pharmacology of LSD, which summarizes the results of over 3,000 studies, Annelie Hintzen and Torsten Passie assert that "acoustic phenomena" play only "a marginal role" in the experience of LSD, but note that "auditory illusions" such as droning, booming, ringing, and rattling, have been known to

⁵⁵² The effects that are identified in this dissertation are cited in multiple scientific and popular accounts of LSD experiences. Hence while the prevalence of these effects remains unknown, my assertion of their existence is not based upon accounts from a single study or individual.

⁵⁵³ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 7.

⁵⁵⁴ *Ibid.*, 7-12.

occur, and that general hyperacusis (increased sensitivity to sound) occurs “fairly regularly.”⁵⁵⁵ These statements are consistent with my own, less comprehensive understanding from reading many accounts of LSD experiences. For most people, LSD is predominantly a visual, conceptual, and emotional experience. While LSD does not commonly produce distinct acoustic phenomena, the experience of music can influence and play into many of the drug’s other effects, which in turn can embellish the experience of music.

Synesthesia

As stated by Hintzen and Passie, it is common for people on LSD to become more sensitive to sounds. In some cases, this effect simply yields a more vivid experience of music. A musician who volunteered for Janiger’s study wrote:

I have grown extremely sensitive. My flesh is charged with emotional responsiveness to the Mozart E-flat symphony. My skin seems microscopically thick and porous so as to admit the music more easily. The inner lines of counterpoint are suddenly so clear. The dissonances are so penetrating, and the bass-line is positively alive.⁵⁵⁶

In other instances, LSD has been documented to give spectacular experiences of music through a phenomenon known as *synesthesia*. Synesthesia occurs when one type of sensory stimulus—in this case, auditory stimuli from music—produces secondary subjective sensations in another sensory region. While some individuals are born with

⁵⁵⁵ Ibid., 130-31.

⁵⁵⁶ Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 127.

synesthesia, LSD and other psychedelic drugs are known to induce such experiences. The most common effects being visual representations of sound.⁵⁵⁷ Describing such visuals, a psychiatric patient in Bonny and Pahnke's study stated:

Ex. 19: As the music moved, wherever the imagination went the image mirrored the imagination, thus, if one wanted to be strung out on a note ... one could move along on a great panorama of this one single note, changing color and texture. For instance, there were two Beethoven pieces played and in both cases I seemed to see pastel shades, as though the same composer evoked the same type of coloring.⁵⁵⁸

Ex. 24: The most beautiful array of fabrics and trimmings in fantastic inter-weaving of designs [...] in delicate colors of pastel to more intense in hue followed the inter-weaving movements of the music—visualizations of the voice timbre—ever changing in complex and beautiful ways.⁵⁵⁹

Another patient experienced synesthetic sensations of a tactile nature while listening to

Scriabin's *Poem of Ecstasy*:

Ex. 18: Pressure building up in rhythm with the music, I could feel myself taking six deep [inhalations] as though the music was pacing my respiration. It was a sublime feeling of not being able to get enough of this beautiful music inside me. Filling up to the bursting point at the time that the music subsided, I felt like I was floating down, exhausted.⁵⁶⁰

Depersonalization, Dechronicization, and Altered Spatial Awareness

A source of extraordinary conceptual experiences on LSD is the depersonalization effect, which causes an individual to lose their sense of “self” or ego. In some instances,

⁵⁵⁷ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 132.

⁵⁵⁸ Bonny and Pahnke, “The Use of Music in Psychedelic (LSD) Psychotherapy,” 73.

⁵⁵⁹ Ibid.: 74.

⁵⁶⁰ Ibid.: 72.

the loss of a clearly delineated “self” results in an individual feeling connected to a person or object to the extent that they feel as though they are a part of it.⁵⁶¹ Two patients in the Bonny and Pahnke study stated:

Ex 9: I sang with the choir, and felt wrapped up in the organ, in the sense that I wasn’t simply listening to the organ, I wasn’t playing the organ, I *was* the organ, particularly the bass notes.⁵⁶²

Ex. 10: I became the cello...and I became the artist who played, knowing before she knew how her bow was to be placed on the string; knowing her musical thoughts and feelings before she put them into execution. I was creator and created, a part of every incremental moment of being, a musically perfect moment-to-moment experience.⁵⁶³

Another major effect that has consistently been reported to interact with the experience of music is dechronicization—LSD’s powerful ability to distort the perception of time. On this phenomenon, Hintzen and Passie write:

The impairment of time is usually felt as an enormous stretching and prolongation of temporal experience, leading to a feeling of complete standstill, of “eternity,” of “unlimited duration,” etc. A few minutes may correspond to a subjective period of years.⁵⁶⁴

This too was experienced by Bonny and Pahnke’s patients:

Ex 16: That final chord extended as I counted it beat by beat, on a metronome which I could hear ticking; it extended for twenty-four measures of four beats each. During the experience the music frequently did strange things like that. It might take one note ten or fifteen years to finally change into another note. At other times the music was greatly accelerated.⁵⁶⁵

Ex. 17: I had the sense of actually being able to crawl between the notes and get into the spaces in the music. Also, as the bow moved across the

⁵⁶¹ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 131.

⁵⁶² Bonny and Pahnke, “The Use of Music in Psychedelic (LSD) Psychotherapy,” 70.

⁵⁶³ Ibid.

⁵⁶⁴ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 132.

⁵⁶⁵ Bonny and Pahnke, “The Use of Music in Psychedelic (LSD) Psychotherapy,” 71.

violin, or even more so across the cello, I could hear cell by cell as that bow, slowly, and what sometimes seemed forever, moved across the string it played.⁵⁶⁶

Lastly, individuals under the influence of LSD are also prone to experiencing an altered sense of space to the extent that their spatial orientation may be entirely lost.⁵⁶⁷ I believe that this experience is somewhat related to depersonalization since the process of losing one's sense of "self"—or being—may arguably contribute to any ambiguity about where in physical space the individual exists. In this way, the previous quotes from individuals feeling like they "became" instruments may also relate to LSD's ability to alter spatial perception.

Accounts of these types of extraordinary experiences involving music and LSD are not rare, though there is great variety in the manifestation of the aforementioned effects. It should also be noted that the experiences from the Bonny and Pahnke study occurred on very large doses of LSD that ranged between 200-400ug.⁵⁶⁸ These doses are considerably larger than those administered by Janiger, who dispensed 2ug for every kilogram of body weight, or the average dose one would find on the street, which generally ranges from 60 to 80ug.⁵⁶⁹

⁵⁶⁶ Ibid.

⁵⁶⁷ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 132.

⁵⁶⁸ Bonny and Pahnke, "The Use of Music in Psychedelic (LSD) Psychotherapy," 69.

⁵⁶⁹ Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 20.

Decoupling of Perception and Conceptual Cognition

Individuals under the influence of LSD have consistently had lower scores on standardized tests in studies attempting to measure the drug's impact on capacities such as attention and concentration, abstract thinking, and general intelligence.⁵⁷⁰ Hence by measurable standards it would be presumptuous to assert that LSD *improves* one's thinking, yet many intellectuals, psychologists, and neuroscientists who have taken the drug have appreciated the degree to which it allows an individual to think *differently*.⁵⁷¹ While the thoughts one has on LSD are not necessarily better than those one has while sober, they may lead to novel perspectives that remain with the individual after the drug wears off.

A key way in which LSD provides these novel perspectives is through its capacity to decouple conceptual cognition from perception. Over the course of evolution, human beings developed their five senses. To help these senses function efficiently, our brains developed cognitive processes that help us prioritize sensory information that is relevant to our survival over that which is not. Over the course of our lives, our learned experiences further define these filters. In this way, while our senses are constantly absorbing large amount of “high definition” sounds, sights, and feelings, our filtered *conscious sensory perception* (that of which we are aware) constitutes only a small portion of this dataflow—approximately 40 bits/s according to some research.⁵⁷² LSD

⁵⁷⁰ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 138-41.

⁵⁷¹ The list of individuals who advocate the benefits of LSD's perspective include intellectuals such as Aldous Huxley, Allan Watts, and Gerald Heard; psychiatrists and neurologists like Sidney Cohen and Oliver Sacks; and industrialist such as Richard Branson and Steve Jobs.

⁵⁷² Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 133.

and drugs like it are notable for their apparent capacity to negate the effects of these filters. On this effect Hintzen and Passie state:

Hallucinogenic drugs appear to interfere or counteract this reduction mechanism, enabling a more direct experience and perception beyond the limitations of learned cultural programmes (particularly learned modes of space-time-verbalization identity). This may imply freedom from the confinements of learned, adaptive, survival-oriented perceptual mechanisms.⁵⁷³

Indeed, an individual on LSD may experience various sensory stimuli with less interference from their conceptual cognition. In the *Doors of Perception*, Huxley aptly describes experiencing such a conceptual shift under the influence of mescaline:

I was looking at my furniture, not as the utilitarian who has to sit on chairs, to write at desks and tables, and not as the cameraman or scientific recorder, but as the pure aesthete whose concern is only with forms and their relationships within the field of vision or the picture space. But as I looked, this purely aesthetic, Cubist's-eye view gave place to what I can only describe as the sacramental vision of reality.⁵⁷⁴

Unfortunately, I have yet to find an equally eloquent description of a similar musical experience. I believe this is, in part, due to the fact that few individuals have had Huxley's success in articulating these relatively ineffable aspects of psychedelic experience. It is also true that individuals describing their sessions on LSD tend to focus on the experiences they *gained* as opposed to the normative understandings they temporarily lost. One of Janiger's participants who was an accomplished composer and musician described an experience with a Bartók quartet that may be attributable to a change in his conceptual cognition:

⁵⁷³ Ibid.

⁵⁷⁴ Huxley, *The Doors of Perception and Heaven and Hell*, 28.

I was most struck with the fact that this Bartók quartet, which has a span of some twenty-five minutes, was clear to me from beginning to end as an organic process of the unfolding of a musical idea and of Bartok's searching for a kind of perfection of the musical idea with which he started. Certainly we know enough about great music to know that composers are working with musical ideas from beginning to end that can't be described in verbal terms. This Bartok quartet—in one organic process—was searching for a kind of perfection which could be described in precise scientific musicological terms. And I perceived that it was not something illusory at the time of listening, **because it is still with me**. I bring it back to my workaday reality and I know that quartet. It belongs to me now in a way that it did not before [...] Primarily, I want to stress, though, this increase in the span of attention [was] far beyond anything I've ever experienced before.⁵⁷⁵

Janiger's participant attributed his ability to better understand the Bartók quartet to a greater attention span, but an increase in this ability is generally not associated with LSD. Of the 15 studies cited by Hintzen and Passie that examine attention and concentration, twelve concluded that LSD decreases these abilities, and three concluded that they stay the same.⁵⁷⁶ It is possible that Janiger's participant was an anomaly, but an alternative explanation could be that a change in his conceptual cognition allowed him to perceive—or pay attention to—different facets of the quartet's structure. Moreover, it is even possible that a decrease in certain aspects of the participant's attention and concentration, such as *learned* attentional habits for listening to music, are related in some way to LSD's capacity to decouple perceptual and conceptual cognition.⁵⁷⁷

⁵⁷⁵ Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 106-07.

⁵⁷⁶ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 138.

⁵⁷⁷ Thanks to Catherine Caldwell-Harris for this observation. Harris has also suggested that further insight into LSD's effect upon attention and creativity may be found in research concerning changes in the prefrontal cortex during REM sleep, a state that is also associated with both decreased attention and heightened creativity.

Affectivity and Hypersuggestibility

While individuals on LSD vary in the degree to which they experience the drug's more spectacular effects, most experience some degree of heightened emotions.⁵⁷⁸ As one might expect, the nature of the emotions an individual experiences on LSD is highly variable. Depending on the individual's "set and setting," they could experience anything from feelings of extreme euphoria to deep depression or fearful paranoia.⁵⁷⁹ Individuals on LSD may also experience a degree of *hypersuggestibility*, a disposition which makes their thoughts and emotions highly responsive to suggestions from that which is going on around them.⁵⁸⁰ This effect was one the reasons some psychiatrists sought to incorporate LSD into various forms of psychotherapy. It is also a means through which musical sound—and its extra-musical associations—can elicit powerful emotional responses from individuals who are under the influence of LSD. Describing her response to the text of "Brezairola" from *Chants d'Auvergne*, a patient in Bonny and Pahnke's music therapy study stated:

The voice seemed to fill my whole being, all the resonate cavities of my body, filling them with warmth and acceptance. I became the baby and was filled with more love than I as a child could take. The overfilling was so emotionally overwhelming that I burst into song singing with the mother, and then becoming the mother giving love to the child, the universal child.⁵⁸¹

⁵⁷⁸ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 133.

⁵⁷⁹ *Ibid.*, 134.

⁵⁸⁰ *Ibid.*, 132.

⁵⁸¹ Bonny and Pahnke, "The Use of Music in Psychedelic (LSD) Psychotherapy," 68.

A less fortunate subject in the study described the feelings of dread that were elicited by another piece of music:

...there began to be some foreboding music and I had a sense of increased anxiety, feeling that with this music I would then again experience some of the extremely difficult feelings I had earlier.⁵⁸²

In this way, music can serve as a powerful suggestive influence over an appreciator's heightened emotions when he or she is under the influence of LSD.

Effects of LSD on the Creative Process

Many researchers have been fascinated by the effect of psychedelic drugs on creativity and have sought to evaluate it through various approaches.

Standardized Tests

A few researchers have attempted to evaluate LSD's impact on creativity using standardized tests. In McGlothlin, Cohen, and McGlothlin (1967), researchers attempted to measure the residual effect of LSD on 24 graduate students that were given 200ug doses of the drug in three separate sessions.⁵⁸³ Many of these individuals noted an increased interest in the arts on the questionnaire they completed at the conclusion of the study. The most common change, which was reported by 62% of participants, was "a

⁵⁸² Ibid.

⁵⁸³ W. McGlothlin, S. Cohen, and M. S. McGlothlin, "Long Lasting Effects of LSD on Normals," *Archives of General Psychiatry* 17, no. 5 (1967): 521.

greater appreciation of music.”⁵⁸⁴ The participants’ sober performance on four of Guilford’s divergent thinking tests—a series of standardized tests designed to assess creativity—at the conclusion of the LSD sessions did not show a significant change from their pre-drug scores. At the end of the study, the researchers concluded that the participants’ increase in aesthetic appreciation and related activities was not accompanied by an increase in “sensitivity and performance.”⁵⁸⁵

A similar study was conducted the same year by Zegans, Pollard, and Brown that investigated the effect of LSD on the creativity tests scores of 30 graduate students. This study utilized a different battery of standardized tests and had participants complete them while they were under the influence of the drug, but results were largely the same.⁵⁸⁶ Certain individuals did significantly better on a test designed to measure the originality of word associations, but variations in the results of the other tests were not statistically significant.⁵⁸⁷ In this way, the investigators concluded that “the administration of LSD-25 to a relatively unselected group of people, for the purpose of enhancing their creative ability, is not likely to be successful.”⁵⁸⁸

Another notable study in this era was Fischer, Fox, and Ralstin (1972). This test administered psilocybin—not LSD—to a group of 21 college-age volunteers and conducted two tests: one designed to measure brain damage, the other to measure

⁵⁸⁴ Six of the participants dropped out of the study after receiving the first dose of LSD.

⁵⁸⁵ McGlothlin, Cohen, and McGlothlin, “Long Lasting Effects of LSD on Normals,” 529.

⁵⁸⁶ Tests administered included the Mednick Remote Association Test, the Modified Word Association Test, a Mosaic Design Test, the Free Association Test, and the Gottschalk Figure-Perception Test.

⁵⁸⁷ L. S. Zegans, J. C. Pollard, and D. Brown, “The Effects of LSD-25 on Creativity and Tolerance to Regression,” *Archives of General Psychiatry* 16, no. 6 (1967): 746.

⁵⁸⁸ *Ibid.*

creativity. Under the influence of psilocybin, half of the participants obtained scores on the former test that resembled those of individuals with brain damage. Of the participants, 17 were able to complete the various creativity measures, one of which was a figure-drawing test. Notably, the participants with the highest scores for brain damage produced the drawings that were judged to be the most “aesthetically pleasing” by outside evaluators, which prompted the authors of the study to comment that one person’s “brain damage” is another’s “creativity.”⁵⁸⁹ The study concluded that LSD was capable of granting creative experiences, but primarily did so for individuals who are sensitive, intuitive, and less dependent on input from their external surroundings (cognitive field independence). They also noted that only a few of the participants who had creative experiences were able to realize them in some form of creative performance.⁵⁹⁰

The aforementioned studies ultimately failed to demonstrate the ability of LSD to increase creativity—at least as evaluated by the tests available in their day. When asked about similar tests in a 1966 interview with *Playboy*, Timothy Leary stated:

It’s unfortunate that most of the scientific studies on creativity have been done by psychologists who don’t have one creative bone in their body. They have studied people who by definition are emphatically uncreative—namely, graduate students. Is it any wonder that all the “scientific” studies of LSD and creativity have shown no creative results? [...] But if you want to find out whether LSD and marijuana have helped creative people, don’t listen to a psychiatrist; don’t listen to a government bureaucrat. Find the artist and ask him. If you want to find out about creativity, ask the creative person.⁵⁹¹

⁵⁸⁹ Roland Fischera, Ronald Fox, and Mary Ralstin, “Creative Performance and the Hallucinogenic Drug-Induced Creative Experience,” *Journal of Psychoactive Drugs* 5, no. 1 (1972): 29.

⁵⁹⁰ *Ibid.*: 36.

⁵⁹¹ “Interview with Timothy Leary,” 110.

Indeed, as time progressed, the consensus among many researchers who had studied the relationship between psychedelic drugs and creativity was that drugs like LSD were only capable of *unlocking* new facets of creativity within individuals who were creative from the outset. In this way, they concluded that LSD could not bestow the gift of creativity upon an essentially non-creative person.⁵⁹² Leary was also correct that the strongest arguments for the potency of LSD's effect on creativity come from the anecdotal accounts of artists, musicians, poets, and other creative types who credit the drug with opening up new aspects of their creativity.

In 1970, Stanley Krippner conducted a survey in an attempt to evaluate the influence that psychedelic drugs had had on creative people. He interviewed 180 individuals who were considered professionals in their respective art forms, including visual artists, musicians, writers, filmmakers, and actors, collecting information regarding their experience with marijuana, LSD, psilocybin, mescaline, and other psychedelic drugs.⁵⁹³ Most of the 180 artists interviewed were from the vicinity of New York City. Of the group, 162 artists claimed to have experimented with psychedelic drugs.⁵⁹⁴ Of the larger group of 180 interviewees: 63% stated that psychedelic experiences had affected the content of their work, 73% believed that these experiences had resulted in a noticeable improvement in their artistic technique, 79% attributed a change in their

⁵⁹² Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 78-80, 110-11.

⁵⁹³ Stanley Krippner, "Psychedelic Drugs and Creativity," *Journal of Psychoactive Drugs* 17, no. 4 (1985): 240.

⁵⁹⁴ ———, "The Influence Of "Psychedelic" Experience on Contemporary Art and Music.," in *Hallucinogenic Drug Research: Impact on Science and Society*, ed. J Gamage and E Zerkin (Beloit, WI: Stash Press, 1970), 94.

creative approach to these experiences.⁵⁹⁵ In this way, Krippner's study indicated that a significant portion of artistically-inclined individuals in the New York area had experimented with some type of psychedelic drug and subsequently felt that the experience had had a lasting impact on their creativity.

Experiments with Visual Artists

Given the capacity of LSD and similar psychedelic drugs to give their users impressive visual experiences, much attention has been focused on the creativity of visual artists. One of the first attempts to explore this phenomenon took place in 1940 when London-based psychiatrists Walter Maclay and Erich Guttman asked several artists to paint under the influence of mescaline.⁵⁹⁶ In 1954, Janiger began exploring LSD's effect on the creativity of visual artists and other creative types. Similar studies were conducted by L. M. Berlin et al. in 1955 (LSD and psilocybin), Frank Barron in 1963 (psilocybin), and Richard Hartmann in 1969 (LSD).⁵⁹⁷

The study by L. M. Berlin and his colleagues was quite small. Four graphic artists

⁵⁹⁵ Krippner, "Psychedelic Drugs and Creativity," 241-42. These numbers may count a small portion of the 18 individuals who claimed to have not taken psychedelic drugs; Krippner reports that a few individuals believed they had benefited from psychedelic experiences through hypnosis and other means (Krippner 1970: 94)

⁵⁹⁶ Jos ten Berge, "Jekyll and Hyde Revisited: Paradoxes in the Appreciation of Drug Experiences and Their Effects on Creativity," *Journal of Psychoactive Drugs* 34, no. 3 (2002): 250.

⁵⁹⁷ L Berlin et al., "Studies in Human Cerebral Function: The Effects of Mescaline and Lysergic Acid on Cerebral Processes Pertinent to Creative Activity," *The Journal of Nervous and Mental Disease* 122, no. 5 (1955); Frank Barron, *Creativity and Psychological Health: Origins of Personal Vitality and Creative Freedom*. (New York, NY: Van Nostrand, 1963); P Kipphoff, "Artists and LSD," *Encounter* 35 (1969): 34.

of national prominence were asked to paint under the influence of LSD and mescaline. The resulting paintings were deemed to have “greater aesthetic value” than the artists’ usual work by a panel of judges, in part, due to the use of bolder lines and more vivid color.⁵⁹⁸ Hartmann’s study was the second largest of the three, inviting 20 well-known artists in West Germany to paint under the influence of LSD at the Max Planck Institute of Psychiatry in Munich. The investigators devoted approximately a week to each individual, and gave them varying doses of LSD that was determined based on their screening. Many of the artists who participated painted with different forms and themes than those they commonly employed in their regular work. Others captured the visions and altered perceptions they had under the drug.⁵⁹⁹

Janiger’s study was by far the largest of the group and was arguably the least clinical in its setting and approach. He asked 60 prominent artists to paint a picture of an American Indian doll before and after ingesting LSD.⁶⁰⁰ Janiger sought to recruit only professional artists who had received training and were respected by their peers.⁶⁰¹ Many of Janiger’s artists felt a sense of liberation while creating under the effects of LSD. One such individual remarked:

The LSD helped tremendously to relieve inhibitions I had had in my art work. It taught me the value of the impressionistic approach to my art. The impressionistic area of thinking now enters into my work whether it is realistic or abstract.⁶⁰²

⁵⁹⁸ Berlin et al., “Studies in Human Cerebral Function: The Effects of Mescaline and Lysergic Acid on Cerebral Processes Pertinent to Creative Activity.”

⁵⁹⁹ Kippoff, “Artists and LSD,” 36.

⁶⁰⁰ Krippner, “Psychedelic Drugs and Creativity,” 237.

⁶⁰¹ Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 81.

⁶⁰² *Ibid.*, 95.

The other responses artists had to the experience varied greatly. They included enhanced vision:

I perceived all visual detail more precisely. I saw a fuller range of color than I customarily do.⁶⁰³

Intense emotional experiences:

It was when I began the third drawing that energy suddenly poured through me in a joy so overpowering that I cried.⁶⁰⁴

Changes in sensory perception and conceptual understanding:

I was reduced down to the essence of painting for me. COLOR. Right there. No doubt about it. Just color. No form, no line. Space was not important, ideas could go to hell! All that began to exist was color, pure and brilliant. It was like walking into a room with a cobweb full of ideas, doubts, [and] thoughts about painting, and then just leaving them all way behind you and being reduced down to the essence of it all. The “why” of painting [...] It was a complete education in itself. I think I found out what color was to me. Or what I was to color.⁶⁰⁵

And things the artist was not able to put into words:

What I saw can't be explained in words. It is simple as that. I only hope that my paintings will show a little of this vision. And if just a little comes through the surface, I will be quite satisfied.⁶⁰⁶

In terms of aesthetics, in many instances the paintings themselves constituted a shift away from the painter's dominant style, as determined by his or her previous works.

Individuals whose normal approach to their art was representational in nature were particularly prone to more abstract, nonobjective forms of expression.⁶⁰⁷ The paintings

⁶⁰³ Ibid., 96.

⁶⁰⁴ Ibid., 95.

⁶⁰⁵ Ibid., 99.

⁶⁰⁶ Ibid., 96.

⁶⁰⁷ Oscar Janiger and Marlene Dobkin De Rios, “LSD and Creativity,” *Journal of Psychoactive Drugs* 21, no. 1 (1989): 129.

were evaluated by Carl Hertel, who was then a professor of art history at Pitzer College.

Hertel found the paintings to be more interesting on a sensational level, but he was unsure if the majority of artists were able to create an aesthetically superior work while under the influence of the drug.⁶⁰⁸ This may have been due, in part, to difficulties that some of Janiger's artist had retaining their technical proficiency on LSD, though many seemed to improve as they became accustomed to the drug's effects.⁶⁰⁹

When Janiger's study came to a forced conclusion in 1962, he was of the opinion that LSD was capable of allowing individuals to access parts of their creativity that were not normally accessible to them. Specifically, he believed LSD and drugs like it could enhance creativity through the following means:

- 1) Providing a rapidity of thought that accelerates creative thought processes.
- 2) Providing a basic emotional excitement and sense of significance.
- 3) Widening consciousness to include both broad cosmic ideas, but also sharpening perception to see significance in the tiniest details.
- 4) Providing greater accessibility to past experiences and buried memories.
- 5) Causing things to appear to compose themselves into natural harmony.
- 6) Intensifying color so that everything appears brilliantly illuminated from within.
- 7) Causing the association of unrelated objects to be perceived as genuinely novel.
- 8) Freeing the individual from preconceptions.
- 9) Fusing the individual with the object perceived.⁶¹⁰

It also notable that many of Janiger's painters felt that they had permanently gained creative insights through their LSD experiences.⁶¹¹ Indeed, in 1986 several of the

⁶⁰⁸ Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 86.

⁶⁰⁹ Ibid., 87.

⁶¹⁰ Ibid., 109-10.

⁶¹¹ Ibid., 88.

paintings from the study were displayed at an exhibit in Santa Monica entitled *The Enchanted Loom: LSD and Creativity*. The exhibit was attended by 25 of the artists who participated in the study all of whom cited the experience as an oft remembered event that influenced the direction of their work.⁶¹²

Creating Music on LSD

The act of creating a piece of music often consists of several stages, including composition, performance, and production. Though each stage is considered a creative act, all are distinct and require a different skill set from the others. Moreover, it is very common for different individuals to contribute to each stage. For these reasons, evaluating the effect of a psychedelic drug on a piece of music poses different challenges than assessing its impact on a painting.

The sparse literature I have found that discusses the relationship between LSD and the creation of music does not distinguish between these disparate acts of musical creativity. In this way, the learned psychiatrists who were curious about this topic seemed to lack a nuanced understanding of music's distinct creative process. Oscar Janiger enrolled a composer among the participants he recruited for the purpose of studying creativity but seems to have had the individual focus on listening to music instead of trying to create it.⁶¹³ The same is true of research performed by psychologist Stanley

⁶¹² Ibid., 113.

⁶¹³ Ibid., 105.

Krippner. His research was arguably the most focused attempt to explore the relationship between LSD and the creation of music, yet it focused exclusively on musical performance. In 1968 and 1969, Krippner conducted a survey of 27 pop musicians concerning their experiences performing under the influence of psychedelic drugs. Most of the musicians who participated were rock n' roll performers; two were vocalists and the rest instrumentalists. Of the group, 24 claimed to have tried LSD. Of those who had tried the drug, three musicians claimed that their performance was enhanced by LSD, 15 believed that LSD had a negative effect on the quality of their performance, and six claimed that the substance made no difference.⁶¹⁴ Concerning his own experience observing musicians performing on LSD, Krippner wrote:

I have heard musicians perform both with and without the influence of LSD. In no case could the LSD performance be called superior, or even on an equal level. The performer may have been under the impression that he was doing well; in my opinion, however, he typically demonstrated difficulties coordinating his performance with that of the other members of the group. Problems in tempo were common; frequent fingering errors and missed notes also occurred.⁶¹⁵

Krippner's assessment of musicians performing on LSD seems to be purely technical in nature. Nevertheless, the findings of his study and personal anecdotal experiences are congruent with my own understanding from researching this topic: very few musicians perform on LSD.

There are several reasons why LSD is an ill-suited drug to accompany musical performance. As previously mentioned, the majority of studies that have examined LSD's

⁶¹⁴ Krippner, "The Influence Of "Psychedelic" Experience on Contemporary Art and Music.," 102.

⁶¹⁵ Ibid., 103.

effect on attention and concentration have concluded that the drug diminishes these abilities.⁶¹⁶ Furthermore, studies that have attempted to assess the motor skills and reaction times of individuals on moderate doses of LSD have found that the drug also has a negative impact on these functions.⁶¹⁷ In this way, LSD is believed to have a negative impact on psychological and physiological capacities that are vital to musical performance. It is also true that LSD's more spectacular effects, while enjoyable in the context of music appreciation, could be extremely distracting if one was attempting to sing or play an instrument. Discussing his experience with musicians performing on LSD, Bill Graham stated:

I've seen many musicians perform very, very, well, and on occasion they have said, "It's a result of having acquired an awareness of x after having used acid." This I have heard many times. But for the most part the musicians I've seen perform under the influence of acid—it was close to tragic [...] I've known of cases in which a gig had to be cancelled because a certain party was up on Cloud Nine.⁶¹⁸

Even if an individual is capable of overcoming the challenges of performing on LSD, I believe the desirability and benefits of such an experience are questionable. In my experience, most individuals consume LSD with the hope of having a relaxing and fundamentally *passive* experience. Being required to fulfill expectations or execute a task—such as performing music on stage or in a studio—is contrary to the nature of the experience that most individuals seek to have under the drug. Similarly, the performance of music in Western culture is often conceptualized as a projection of the performer's *self*

⁶¹⁶ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 138.

⁶¹⁷ *Ibid.*, 143.

⁶¹⁸ Peter Stafford, "Bill Graham on Acid," *Crawdaddy*, May 1969, 19.

to the listener, especially within popular music. As discussed, one of the most common and fundamental effects of LSD is depersonalization or the diminution of one's sense of self.⁶¹⁹ Hence, while the experience of LSD is highly subjective, the pervasive commonalities that do exist are not likely to compel one to stand on stage and impress their personality upon an audience. The above complications to conventional musical performance may explain, in part, why Ken Kesey and his Merry Pranksters elected to perform improvised music that was incredibly free in structure and understood as a form of group expression by participants.⁶²⁰

Lastly, it is my experience that LSD is not a drug that most individuals consume on a regular basis. It is a potent substance that is revered for the powerful experiences it yields, but it is this very quality that leads most individuals to use it very sparingly. Consequently, as the previous chapter suggests, LSD was seldom a drug that musicians folded into their performance routine.

There are many questions concerning LSD and the creation of music that deserve further exploration. Little is known about LSD's influence on non-performative aspects of music creation, namely composition and production. While these topics seem to have been overlooked by psychologists who have studied the drug, I believe certain works of psychedelic music, which have been explicitly attributed to LSD, exhibit characteristics that constitute a fundamental shift in the thematic and aesthetic style of their creator.⁶²¹ Much like the LSD-inspired art of Janiger's painters, many of these songs can be

⁶¹⁹ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 134.

⁶²⁰ Kesey discusses aspects of this music on Kesey, *The Acid Test*.

⁶²¹ See case studies in chapter four.

interpreted as surrealistic abstractions of more traditional forms of musical expression that exercise a considerable degree of artistic freedom. In this way, while most artists did not routinely play on LSD, it is my belief that the drug played an important *inspirational* role in the creation of some of the most experimental psychedelic music.

MARIJUANA

As with LSD research, studies examining the effects of marijuana have often been influenced by politics. While researchers were able to study LSD for much of the 1950s without interference, marijuana has been a contentious substance for most of the twentieth century. As discussed in chapter one, the drug was stigmatized by its cultural associations with black and Latino Americans, who seem to have been the drug's principal users prior to mid-century.⁶²² Moreover, in the 1930s many left-leaning social engineers and religious conservatives—fresh off their failed attempt to prohibit alcohol—shifted their focus to concerns that young people were becoming addicted to marijuana.⁶²³ In this way, marijuana research has seldom occurred in a neutral context. In some instances, researchers approached their studies with existing biases about the nature of the drug and its effects.⁶²⁴ In others, they were met with opposition from their colleagues or subjected to onerous degrees of government scrutiny. In an article published in 1969, Steven Myers and Donald Caldwell described their experience of

⁶²² Finkelman, *Encyclopedia of American Civil Liberties*, 64.

⁶²³ Ibid.

⁶²⁴ See for example Robert P. Walton, *Marihuana, American's New Drug Problem* (Philadelphia, PA: Lippincott, 1938).

conducting a study on the auditory and visual sensations of marijuana. They noted that many of their colleagues reproached them with suspicions that they were attempting to portray the drug as psychologically harmless and non-threatening to the “structure of society.”⁶²⁵ Even if a researcher was capable of overcoming government and institutional objections, studying marijuana might not be a fruitful choice for his or her career. In the words of Jörg Fachner, a medical doctor: “research on stigmatized cultural lifestyle issues, consciousness and drugs is surely not a theme to open doors to a serious scientific reputation.”⁶²⁶ These factors must be kept in mind when reviewing research involving marijuana.

Effects of Marijuana on the Appreciation of Music

Throughout history, written accounts of marijuana’s effects have often mentioned the drug’s capacity to sharpen one’s sense of hearing. In his experiments with his Parisian *Club des Hashischins* in 1845, Jacques-Joseph Moreau found individuals to be more sensitive to noises and music under marijuana’s influence.⁶²⁷ Similarly, in his *Poem of Hashish*, Charles Baudelaire wrote in 1895 that “the ear perceives almost inaudible sounds in the midst of the most tremendous tumult.”⁶²⁸ In the early twentieth century, as

⁶²⁵ Steven A. Meyers and Donald F. Caldwell, “The Effects of Marihuana on Auditory and Visual Sensation: A Preliminary Report,” *New Physician* 18, no. March (1969): 214.

⁶²⁶ Fachner, “Topographic EEG Changes Accompanying Cannabis-Induced Alteration of Music Perception—Cannabis as a Hearing Aid?,” 4.

⁶²⁷ Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence*, 105.

⁶²⁸ Charles Baudelaire and Théophile Gautier, *The Poem of Hashish* (New York, NY: Harper & Row, 1971).

jazz music spread from New Orleans to urban centers across the United States, marijuana's capacity to enhance one's hearing and musical abilities had become a common rumor. To this end, in 1944 an Assistant Surgeon of the U.S. Public Health Service named C. Knight Aldrich felt it necessary to confront the "common misapprehension" that marijuana could improve musical performance through "increased sensitivity to sound and keener appreciation of rhythm and timing."⁶²⁹ Despite Aldrich's efforts, the popular belief that marijuana enhanced musical experiences continued right into the Sixties.

This affinity between marijuana and music has been apparent to many who have researched the drug. Self-report studies examining the subjective effects of marijuana have clearly evidenced the prevalence of the popular belief that marijuana enhances the sensation of sound.⁶³⁰ Discussing the relationship between music and marijuana in 1970—after conducting his own large-scale self-report study—Erich Goode remarked:

The evidence is overwhelming that marijuana stimulates a much more powerful identification, appreciation, and feeling for the music [...] About 85% [of the 191 individuals interviewed in the study] said they had actually listened to music while high, partly a testimony to the fact that music is a fixture in the marijuana mythology—everyone knows that listening to music while high is *the* thing to do.⁶³¹

Between 1968 and 1980, a handful of studies sought to explain what was behind this belief, but only a few studies found marijuana to have a meaningful impact on their subjects' hearing when evaluated through objective measures. In 1978, Globus *et al.*

⁶²⁹ CK Aldrich, "The Effect of Synthetic Marihuana-Like Compound on Musical Talent as Measured by the Seashore Test," *Public Health Report* 59 (1944): 431.

⁶³⁰ These studies are discussed below.

⁶³¹ Erich Goode, *The Marijuana Smokers* (New York, NY: Basic Books, 1970), 157.

discussed previous researchers' inability to demonstrate many of marijuana's reported effects in the laboratory. They observed that while it would certainly be reasonable for scientists to discount self-report claims of enhanced sensation—auditory and otherwise—as “socially conditioned expectations,” the objective findings at that time did not justify the social behavior surrounding the drug, and quoted a caustic warning from fellow psychologist Charles Tart:⁶³²

Conventional research on the nature of marijuana intoxication tells us that the primary effects are a slight increase in heart rate, reddening of the eyes, some difficulty with memory, and small decrements in performance on complex psychomotor tests. Would you risk going to jail to experience these? ⁶³³

In this way, explanations for many of marijuana's subjective effects are arguably still outstanding, but will hopefully become clearer as the fields of neuroscience and cognition continue to evolve.

In the interest of full disclosure, and to add an additional piece of anecdotal evidence, I should state that my interest in the subject of psychedelic music is partially the result of my own experiences listening to music on marijuana. When I first sampled the drug, I had already attained a Bachelor of Music degree and possessed a trained ear for discerning fine details in music. Moreover, to the best of my memory, I was not expecting my listening abilities to improve. I was surprised by the way marijuana seemed to enhance the richness of tone colors and increase my ability to discern individual voices and instruments. I listened to songs I had previously heard hundreds of times, and new

⁶³² GG Globus et al., “Effects of Marijuana Induced Altered States of Consciousness on Auditory Perception,” *Journal of Psychedelic Drugs* 10, no. 1 (1978): 71.

⁶³³ Charles T. Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication* (Palo Alto, CA: Science and Behavior Books, 1971).

features—many buried deep within the mix of the track—jumped out at me. In this way, I believe I have personally experienced marijuana’s capacity to alter, if not improve, auditory sensations.

The following section of this chapter is divided into three subsections. The first is a review of self-report studies concerning marijuana and auditory sensation. The second is a summary of studies that have sought to objectively measure aspects of hearing under the influence of marijuana. The third details a self-report study I conducted specifically for this dissertation, which examines marijuana’s influence on specific aspects of music appreciation.

Self-Report Studies

Beginning in the 1970s, several large-scale self-report studies were conducted on the subjective effects of marijuana. Of these studies, two are particularly notable for their size and comprehensiveness. The first is a study conducted by Erich Goode, which was discussed in chapter seven of his book *The Marijuana Smokers* (1970).⁶³⁴ Goode’s study is notable for the fact that its information was collected through open-ended questions presented to its participants by an interviewer. Moreover, the study’s sample size of 191 individuals is especially impressive, given this methodology.⁶³⁵ The second is a study that was published by psychologist Charles Tart in his book *On Being Stoned* (1971).⁶³⁶ Tart’s

⁶³⁴ Goode, *The Marijuana Smokers*.

⁶³⁵ Ibid., 151.

⁶³⁶ Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*.

study involved 150 participants who shared information through a mail-in questionnaire consisting of 224 closed-ended questions. While smaller and less adaptive than Goode's study, the quantity and specificity of Tart's queries make it an interesting study.

General Acuity and Music Appreciation

The most commonly referenced effect of marijuana on hearing is an increase in the acuity of auditory sensations. Indeed, George Harrison once stated of his own experience:

I think that pot definitely did something for the old ears, like suddenly I could hear more subtle things in sound.⁶³⁷

One of the first large-scale self-report studies on the subjective effects of marijuana was a relatively informal survey conducted in New York City by Richard Brotman and Frederic Suffet in 1969.⁶³⁸ Of the 74 users interviewed, 85% stated that being high made music sound better.⁶³⁹

A year later, Erich Goode inquired into his subjects' experiences of listening to music on marijuana. The first question he asked participants was quite simple and open: "What is music like when you are high?" If this question failed to garner a meaningful response, he would follow up with an inquiry asking the participant to compare the experience of listening to music high with listening to it "straight."⁶⁴⁰ Of the 191

⁶³⁷ Jenny Boyd, *Musicians in Tune: Seventy-Five Contemporary Musicians Discuss the Creative Process* (New York, NY: Simon & Schuster, 1992), 206.

⁶³⁸ Richard Brotman and Frederic Suffet, "Marijuana Users' Views of Marijuana Use" (paper presented at the Annual Meeting of the American Psychopathological Association, 1969).

⁶³⁹ Ibid.

⁶⁴⁰ Goode, *The Marijuana Smokers*, 158.

individuals Goode interviewed, 173 (85%) had tried listening to music while under the influence of marijuana. Of those participants, approximately one percent felt that music sounded *worse* while high, 10% felt that music was more or less the *same*, and the remaining 89% felt that music sounded *better*.⁶⁴¹ The participants who believed that music sounded better gave various reasons for making the statement, many of which related to acuity. Of these individuals, 17% simply explained that their hearing was more acute. Another 23% were more specific, claiming that they could separate out individual instruments, sounds, and levels of sound, to better appreciate the interwoven texture of a musical composition. Some even likened this experience to having a “built-in stereo set.” Six percent made a very similar claim, but expressed the ability to hear just one voice or instrument in a musical texture, with the other sounds seeming subdued.

Charles Tart’s questionnaire asked respondents four questions related to the acuity of sound and music, a few of which generated some of the strongest results in his survey.⁶⁴²

Question 24:

I can hear more subtle changes in sounds; e.g. the notes of music are purer and more distinct, the rhythm stands out more.

Frequency of occurrence in respondents:

Never (1%), Rarely (0%), Sometimes (4%), Very Often (25%), Usually (70%)

⁶⁴¹ Ibid.

⁶⁴² Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*, 71-72.

“How Stoned” respondents had to be to experience effect:

Just (27%), Fairly (51%), Strongly (17%), Very Strongly (3%), Maximum (0%)

No Answer/Other Answer (2%)⁶⁴³

Question 25:

I can understand the words of a song which are not clear when straight.

Frequency of occurrence in respondents:

Never (4%), Rarely (10%), Sometimes (20%), Very Often (29%), Usually (37%)

“How Stoned” respondents had to be to experience effect:

Just (19%), Fairly (45%), Strongly (25%), Very Strongly (5%), Maximum (1%),

No Answer/Other Answer (5%)

Question 26:

I have difficulty hearing things clearly; sounds are blurry and indistinct.

Frequency of occurrence in respondents:

Never (61%), Rarely (23%), Sometimes (13%), Very Often (1%), Usually (0%)

No Answer/Other Answer (2%)

“How Stoned” respondents had to be to experience effect:

Just (6%), Fairly (5%), Strongly (6%), Very Strongly (9%), Maximum (10%)

No Answer/Other Answer (64%)

⁶⁴³ Tart’s methodology on this second “how stoned” rating is somewhat confusing. On his questionnaires, he gave his respondents the opportunity to choose a sixth option labeled “LSD” if they had only experienced an effect under the influence of a more powerful psychedelic. He does not include this field in the results he provides, but gives a separate tally in an appendix. Some of the percentage-based results Tart provides do not add up to 100%; I have added the “No Answer/Other Answer” field to declare this missing portion of data, which may represent answers that selected “LSD” or questions that were skipped.

Tart also inquired into marijuana's purported capacity to increase a listener's ability to discern individual sources of sound, though his question conceptualized the effect as a change in his or her spatial awareness of them.⁶⁴⁴

Question 29:

When listening to stereo music or live music, the spatial separation between the various instruments sounds greater, as if they were physically further apart.

Frequency of occurrence in respondents:

Never (13%), Rarely (4%), Sometimes (23%), Very Often (31%), Usually (29%)

“How Stoned” respondents had to be to experience effect:

Just (7%), Fairly (32%), Strongly (35%), Very Strongly (7%), Maximum (1%)

No Answer/Other Answer (18%)

Subsequent self-report studies offered less specific findings concerning acuity and appreciation under the influence of marijuana. Berke and Hernton (1974) found “appreciation of music” to be the third most frequently-cited effect of marijuana in their interviews with 522 participants.⁶⁴⁵ A little over a decade later, Halikas, Weller, *et al.* (1985) found a “keener sense of sound” to be a prominently acute effect of marijuana for the 100 participants they interviewed.⁶⁴⁶

⁶⁴⁴ Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*, 71-72.

⁶⁴⁵ J Berke and C Hernton, *The Cannabis Experience: An Interpretive Study of the Effects of Marijuana and Hashish* (London: Peter Owens, 1974).

⁶⁴⁶ James A. Halikas et al., “A Longitudinal Study of Marijuana Effects,” *The International Journal of Addictions* 20, no. 5 (1985).

Synesthesia, Depersonalization, Dechronicization

It is not uncommon for marijuana users to experience some of the effects that are associated with LSD, though they are less common and intense on this drug.

Dechronicization is a commonly experienced with marijuana. In Goode's study, 23% of participants claimed that time felt "slowed down" or "stretched out."⁶⁴⁷ Tart's study also found the effect to be very common among his respondents.⁶⁴⁸

Question 58:

Time passes very slowly; things go on for the longest time (e.g., one side of a record seems to play for hours).

Frequency of occurrence in respondents:

Never (1%), Rarely (3%), Sometimes (21%), Very Often (43%), Usually (31%)

No Answer/Other Answer (1%)

"How Stoned" respondents had to be to experience effect:

Just (4%), Fairly (29%), Strongly (37%), Very Strongly (21%), Maximum (4%)

No Answer/Other Answer (5%)

Participants in both the Goode and Tart studies also made reference to feeling certain degrees of depersonalization or a loss of one's sense of self. Goode reported that 12% of his interviewees claimed to have experienced this effect, but in his discussion of these findings he conceptualized depersonalization as a negative psychotic experience.⁶⁴⁹

⁶⁴⁷ Goode, *The Marijuana Smokers*, 153. My personal experience is that different strains of marijuana produce this effect more than others.

⁶⁴⁸ Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*, 92.

⁶⁴⁹ Goode, *The Marijuana Smokers*, 165.

For this reason, the results of Goode's open-ended questioning of participants may have yielded different answers to questions of "ego loss" than those of LSD researchers like Oscar Janiger who believed that depersonalization could yield both positive and negative experiences.⁶⁵⁰ Still, in her discussion of listening to music while high, one of Goode's participants remarked: "I am in the music, engulfed by it. It's happening *through* me."⁶⁵¹ Tart seemed to consider depersonalization to be an extreme effect, though not necessarily a psychotic one. His questionnaire inquired about it in a slightly hyperbolic manner:

Question 189:

I lose all sense of self, of being a separate ego, and feel at one with the world.

Frequency of occurrence in respondents:

Never (19%), Rarely (25%), Sometimes (31%), Very Often (21%),
Usually (3%)
No Answer/Other Answer (1%)

"How Stoned" respondents had to be to experience effect:

Just (1%), Fairly (8%), Strongly (23%), Very Strongly (20%), Maximum
(17%)
No Answer/Other Answer (31%)

Some marijuana users claim to experience synesthesia under the drug—often in the context of listening to music. In Goode's study, six percent of participants whose enjoyment of music was enhanced by marijuana mentioned experiencing synesthesia.⁶⁵²

⁶⁵⁰ Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 109.

⁶⁵¹ Goode, *The Marijuana Smokers*, 157.

⁶⁵² *Ibid.*, 158.

Participants in Tart's study reported a high degree of synesthesia between the visual and auditory senses:⁶⁵³

Question 216:

Sounds have visual images or colors associated with them, synchronized with them.

Frequency of occurrence in respondents:

Never (20%), Rarely (23%), Sometimes (33%), Very Often (16%),
Usually (7%)
No Answer/Other Answer (1%)

“How Stoned” respondents had to be to experience effect:

Just (1%), Fairly (10%), Strongly (25%), Very Strongly (19%), Maximum
(19%)
No Answer/Other Answer (26%)

Tart also noted that males seemingly needed to be more “stoned” than females to experience this effect.⁶⁵⁴ None of the other self-report studies I encountered directly addressed synesthesia, though “visual illusions”—not necessarily correlated to auditory sensation—are mentioned in Berke and Hernton (1974).⁶⁵⁵

⁶⁵³ Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*, 74.

⁶⁵⁴ I am skeptical of Tart's results on this question. I have not found synesthesia to be an effect that is often cited in other sources, or commonly mentioned in anecdotal accounts of marijuana experiences.

⁶⁵⁵ Berke and Hernton, *The Cannabis Experience: An Interpretive Study of the Effects of Marijuana and Hashish*.

Affectivity

Another purported effect of marijuana is its capacity to heighten one's emotional responses to music. In Goode's study, 40% of the individuals who claimed that music sounded better under the influence of marijuana attributed their statement to the fact that they could "get into" music better or experience a greater level of emotional involvement with it.⁶⁵⁶ Tart did not collect any data that was specifically related to his participants' emotional reactions to music on marijuana, but many respondents claimed to feel emotions more strongly under the drug's influence:⁶⁵⁷

Question 161:

I feel emotions much more strongly when stoned, so they affect me more.

Frequency of occurrence in respondents:

Never (6%), Rarely (13%), Sometimes (37%), Very Often (27%), Usually (17%)

"How Stoned" respondents had to be to experience effect:

Just (14%), Fairly (21%), Strongly (39%), Very Strongly (4%), Maximum ([?]%), No Answer/Other Answer ([?])%⁶⁵⁸

In some instances, this heightened emotional state seems to manifest itself in feelings of empathy for the creators of music. A 27-year-old participant in Goode's study told him that she could "identify exactly with what the composer was feeling and thinking when he composed the music."⁶⁵⁹ Tart's study confirmed this suggestion in a general sense:

⁶⁵⁶ Goode, *The Marijuana Smokers*, 158.

⁶⁵⁷ Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*, 183.

⁶⁵⁸ The data for "Maximum" and "No Answer/Other Answer" appear to have been accidentally omitted from the book.

⁶⁵⁹ Goode, *The Marijuana Smokers*, 158.

Question 114:

I empathize tremendously with others; I feel what they feel; I have a tremendous intuitive understanding of what they are feeling.

Frequency of occurrence in respondents:

Never (7%), Rarely (11%), Sometimes (40%), Very Often (25%), Usually (18%)

“How Stoned” respondents had to be to experience effect:

Just (12%), Fairly (31%), Strongly (35%), Very Strongly (10%), Maximum (1%)

No Answer/Other Answer (~11%)

Similarly, “enhanced insight into others” was the sixth most cited effect of marijuana in Berke and Hernton (1974).⁶⁶⁰

Lab Studies

Several researchers sought to examine and better understand the effects cited in the aforementioned self-report studies, but encountered a lot of difficulty demonstrating them. There are, however, a few important issues to keep in mind when reviewing the following research, which may partially explain some of the variances between self-report studies and objective findings. One issue concerns the substances that were administered in these studies. While researchers have historically paid considerable attention to tetrahydrocannabinol (THC), a cannabinoid that was long assumed to be

⁶⁶⁰ Berke and Hernton, *The Cannabis Experience: An Interpretive Study of the Effects of Marijuana and Hashish*.

marijuana's principal active ingredient, it is now known that the plant contains at least 66 cannabinoid compounds capable of producing various psychological and physiological effects.⁶⁶¹ Furthermore, different strains of the marijuana plant contain different levels of these compounds and produce various types of "highs" in their users.⁶⁶² These facets of marijuana were not understood when many of the studies I am about to discuss were conducted. Researchers did not realize the complexity of marijuana's psychoactive properties until the mid-1970s, and it was not until the late 1980s that they identified the cannabinoid receptors upon which the drugs acts.⁶⁶³ Given that marijuana contains many active ingredients in addition to THC, it is important to distinguish between studies that used raw marijuana and those that administered pure THC. When the former is used, it is important to pay attention to the exact strain of the plant if this information is provided.

There were also competing ideologies concerning the dosage and administration of marijuana in these studies. This issue of dosage was complicated by several factors. The administration of a weighted amount of dried marijuana was complicated by the fact that different strains of the plant have varying degrees of potency. Even if researchers could estimate their material's THC content, there could be considerable variance in the efficiency with which subjects would smoke and absorb the marijuana's cannabinoids. Researchers that sought to eliminate these factors by using a cannabis extract or pure THC were still faced with the problem of individuals having varying tolerances to the

⁶⁶¹ Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence*, 122.

⁶⁶² "Indica Vs. Sativa: Understanding the Differences," LeafScience.com, <http://www.leafscience.com/2014/06/19/indica-vs-sativa-understanding-differences/>. Accessed January 18, 2015.

⁶⁶³ ———, *Understanding Marijuana: A New Look at the Scientific Evidence*, 124, 36.

drug. In response to these challenges, some researchers recruited individuals who were experienced with marijuana and simply asked them to smoke to a subjective “high.” Others chose to administer measured amounts of the drug, but would often perform their tests at various levels of dosage.

Most of the studies discussed below did not benefit from the important advances that have taken place in neuroscience, music cognition, and our fundamental understanding of marijuana and its interactions with the body. It should also be observed that several of the studies below are intended to assess their participants’ *hearing* and not their ability to appreciate music. Moreover, as Liedgren et al. (1976) point out in their discussion of methodology, many of the hearing tests employed by lab researchers were designed to assess below-average abilities in a therapeutic context—not abilities that were above average.⁶⁶⁴

EEG Studies

Modern EEG studies have confirmed that the brain processes sound differently when affected by marijuana. In 2002, Jörg Fachner conducted an EEG study on four individuals to determine if their brain activity while listening to music changed after smoking a cigarette containing Nepalese hash (approximately 20mg of THC).⁶⁶⁵ After smoking, the EEG of Fachner’s subjects showed changes in the temporal and occipital

⁶⁶⁴ S. Liedgren et al., “Effect of Marijuana on Hearing,” *Journal of Otolaryngology* 5, no. 3 (1976): 236.

⁶⁶⁵ Fachner, “Topographic EEG Changes Accompanying Cannabis-Induced Alteration of Music Perception—Cannabis as a Hearing Aid?,” 11.

cortexes, as well as an increase in the alpha wave strength of the parietal association cortex. In his conclusions, Fachner asserts that these changes demonstrate an altered perception of music, as well as a hyperfocus on musical time and space.⁶⁶⁶ Another study conducted in 2007 sought to measure the strength of the brain's response to auditory-evoked *mismatch negativity* on marijuana.⁶⁶⁷ Researchers found that the amplitude of mismatch negativity did not significantly change with pure THC. It did, however, increase under a marijuana extract, which contained both THC and the cannabinoid *cannabidiol* (CBD).⁶⁶⁸ The study's primary objective was to explore mismatch negativity in relation to schizophrenia—not music cognition or auditory acuity. Nevertheless, its findings are further evidence of marijuana's capacity to alter the brain's processing of auditory stimuli, and highlight the possibility that cannabinoids other than THC might play an important role in these changes.

Negative Studies

This section briefly details the many studies in which no change in participants' auditory senses could be measured.

⁶⁶⁶ Ibid.: 30.

⁶⁶⁷ Auditory-evoked “mismatch negativity” is a phenomenon detected on EEG readings when an abnormal auditory stimuli is presented. For example, a mismatch negativity event would be likely to occur with the letter “d” in the sequence “s s s s s s s s d s s s” due to its heterogeneity.

⁶⁶⁸ Georg Juckel et al., “Acute Effects of Delta9-Tetrahydrocannabinol and Standardized Cannabis Extract on the Auditory Evoked Mismatch Negativity,” *Schizophrenia Research* 97 (2007): 113.

The first two scientific studies that attempted to measure marijuana's effects on hearing were both conducted in 1944. One of these studies occurred as part of the LaGuardia Committee Report that was commissioned by the Mayor of New York to explore the prevalence of marijuana in the city and the drug's impact upon its citizens' health.⁶⁶⁹ The report seems to be regarded as objective by historians, though it was a contentious political foil to the arguments being propagated by Harry Anslinger and others. For this study, eight tests from the Kwalwasser-Dykema Music Tests were administered to 54 volunteers both before and after they had smoked 5mg of marijuana. These tests included evaluations of tone memory, tone quality discrimination, tone intensity discrimination, tone movement, time discrimination, rhythm discrimination, pitch discrimination, and a melodic taste test.⁶⁷⁰ Notably, several of these tests measured a subject's ability to discriminate "good" musical practices—such as proper voice leading—from "bad" ones, and lacked objectivity.⁶⁷¹ Morrow also tested marijuana's effect on his participants' ability to hear ascending and descending frequencies from a Galton Whistle. In all of these tests, Morrow found no change in his participants' performance.⁶⁷²

⁶⁶⁹ Robert S. Morrow, "The La Guardia Committee Report: The Marihuana Problem in the City of New York," (New York City: 1944).

⁶⁷⁰ Ibid.

⁶⁷¹ Paul R. Farnsworth, *Musical Taste: Its Measurement and Cultural Nature* (Stanford, CA: Stanford University Press, 1950), 33.

⁶⁷² Morrow, "The La Guardia Committee Report: The Marihuana Problem in the City of New York."

The other study performed in 1944 was undertaken by C. Aldrich Knight, an Assistant Surgeon with the U.S. Public Health Service.⁶⁷³ Knight sought to assess if a 60mg dose of synthetic pyrahexl compound would alter the musical abilities of twelve men, all of whom were serving prison sentences for violating marijuana laws and had experience using the drug. Pyrahexl was the closest substance to THC that was available at that time.⁶⁷⁴ Aldrich used the Seashore Test of Musical Talent to measure performance. This test battery was more objective than the one used by Morrow and assessed subjects' ability to discriminate loudness, timing, timbre, and the relative relationship of two pitches.⁶⁷⁵ Although Aldrich's participants felt they performed better on these tests after receiving the pyrahexl compound, there was no statistically significant change in their actual performance.⁶⁷⁶

Several scientific studies occurred in the Sixties and Seventies that also yielded negative results. Clark and Nakashima (1968) attempted to measure the impact of a marijuana extract on the ability of 12 participants to discriminate between various auditory frequencies, but found that subjects performed the same at all dosages.⁶⁷⁷ Martz et al. (1972) tested the auditory thresholds of eight volunteers in their early twenties after both a placebo cigarette and a marijuana cigarette containing approximately 50 ug/kg of

⁶⁷³ Aldrich, "The Effect of Synthetic Marihuana-Like Compound on Musical Talent as Measured by the Seashore Test."

⁶⁷⁴ Ibid.: 431.

⁶⁷⁵ Ibid.

⁶⁷⁶ Ibid.: 433.

⁶⁷⁷ L. Clark and E. Nakashima, "Experimental Studies of Marijuana," *American Journal of Psychiatry* 125, no. 3 (1968).

THC, but found no statistically significant difference in the performances.⁶⁷⁸ Homer Reed had 20 experienced marijuana users complete the rhythm portion of the Seashore Music Test while on the drug for his 1974 monograph *The Use of Marijuana*, but found there to be no variance between baseline results and those attained after his participants smoked a single marijuana cigarette.⁶⁷⁹ Liedgren et al. (1976) performed a study on marijuana's acute effects on hearing, which had 30 participants complete a diverse array of auditory tests before and after smoking a marijuana cigarette containing approximately 8mg of THC.⁶⁸⁰ This study observed no change in test results on marijuana. The investigators, however, only felt comfortable concluding that marijuana did not worsen hearing, as they did not believe that their tests were designed to adequately evaluate above-average abilities.⁶⁸¹ Lastly, Mulheran et al. (2002) revisited questions concerning the drug's effect on auditory thresholds and frequency resolution in the 21st century.⁶⁸² In the study, eight participants who had previous experience with marijuana completed a series of tests in three sessions: one with a placebo, and the other two under the influence of 7.5mg and 15mg of pure THC.⁶⁸³ The tests included a measurement of the subject's auditory threshold using pure tone audiometry, as well as a frequency resolution test that required

⁶⁷⁸ Robert Martz, Francis Sondag, and Bruce Rodda, "The Effect of Marihuana on Auditory Thresholds," *Journal of Auditory Research* 12 (1972): 146-47. The symbol "ug/kg" indicates that a microgram of THC was provided for every kilogram of a subject's body weight.

⁶⁷⁹ Homer BC Reed, "Cognitive Effects of Marijuana," in *The Use of Marihuana: A Psychological and Physiological Inquiry*, ed. JH Mendelson (New York, NY: Plenum Press, 1974).

⁶⁸⁰ Liedgren et al., "Effect of Marihuana on Hearing."

⁶⁸¹ Ibid.: 233.

⁶⁸² M Mulheran, P Middleton, and JA Henry, "The Acute Effects of Tetrahydrocannabinol on Auditory Threshold and Frequency Resolution in Human Subjects," *Human and Experimental Toxicology* 21, no. 6 (2002).

⁶⁸³ Ibid.: 289.

the participant to detect a 4-kHz tone under masking noise conditions. Researchers found no meaningful change in their participants' performance.⁶⁸⁴

Positive Studies

The following section details studies in which researchers detected a statistically significant change in their subject's auditory senses under the influence of marijuana.

The earliest lab research I have found to lend some support to self-report studies was conducted by Steven Meyers and Donald F. Caldwell in the late Sixties. This research is also notable for two well-reasoned features in its design. The first was its use of real marijuana instead of synthesized THC. The second was its use of subjective dosing; instead of administering weighted portions of marijuana to participants, Meyers and Caldwell allowed them to smoke to their own subjective "high." While this method of dosing did not allow them control the amount of marijuana being ingested, it was one of the first studies to recreate the conditions under which recreational users had experienced the subjective effects cited on self-report studies. In a critique of previous studies, some of which were administering very high doses of pure THC to participants, Meyers and Caldwell stated:

In the social context, delta9-THC is not taken in pure form, nor is crude marihuana parenterally administered, and seldom is it smoked to a point of pharmacological toxicity. In our thinking, such studies would be analogous to attempting to determine the sociological and psychological

⁶⁸⁴ Ibid.

effects of wine by the parenteral administration of a toxic dose of absolute ethyl alcohol.⁶⁸⁵

Using this approach, Caldwell and Meyers organized a group of 20 volunteers, and split them into an experimental group and a control group. All participants completed a series of auditory tests that measured their auditory threshold, tone amplitude differential threshold, and tone frequency differential threshold. The researchers appreciated a slight increase in the auditory threshold of the group that smoked marijuana, which was beyond the deviation observed in the control group. There was no statistically significant change on the other two tests.⁶⁸⁶

In 1973, Thaler *et al.* conducted a pilot study that had five participants complete a large array of auditory tests that measured their respective auditory thresholds, speech reception thresholds, and speech discrimination abilities.⁶⁸⁷ Participants also completed the Rosenberg Tone Decay Test and Bekesy Sweep Frequency Test.⁶⁸⁸ Subjects completed these tests in both a normal state and under the influence of marijuana. As in Meyers and Caldwell, participants were allowed to smoke real marijuana to the point of their own subjective high.⁶⁸⁹ Most of the tests performed did not reveal any change in participants' abilities that exceeded standard deviations. Results on the Bekesy test, a

⁶⁸⁵ Meyers and Caldwell, "The Effects of Marihuana on Auditory and Visual Sensation: A Preliminary Report," 213.

⁶⁸⁶ Donald F. Caldwell, Steven A. Meyers, and Edward F. Domino, "Effects of Marihuana Smoking on Sensory Thresholds in Man," in *Psychotomimetic Drugs*, ed. Daniel H. Efron (New York, NY: Raven Press, 1970), 307.

⁶⁸⁷ D Fitzpatrick and S Thaler, "Marihuana and Hearing," *Canadian Journal of Otolaryngology* 2, no. 4 (1973): 291.

⁶⁸⁸ *Ibid.*: 292.

⁶⁸⁹ *Ibid.*

distinct method of testing auditory threshold, were abnormal but failed to reveal any significant trends.⁶⁹⁰ The results of the speech discrimination tests were quite remarkable, however. On average, participants' ability to discern words at a low volume improved by 26.9% under the influence of marijuana. Similarly, participants' ability to discern words under a masking noise improved an average of 59% on the drug.⁶⁹¹ Though the sample size of this study was very small, the results are the most impressive evidence in support of claims made in self-report studies.

Moskowitz & McGlothlin (1974) conducted the only study I encountered that evidenced a decline in auditory abilities under the influence of marijuana.⁶⁹² This study examined the ability of 23 participants to detect the presence of a fleeting tone sounded in a pair of headphones, both with and without the presence of a noise intended to divide their attention. The subjects performed these tests under normal conditions and after smoking marijuana cigarettes calculated to yield approximately 50, 100, and 200ug of THC.⁶⁹³ The researchers found that as the dose of marijuana increased, participants' ability to reliably detect the tone diminished. Especially notable was the increasing prevalence of "false alarms" (believing the tone was sounded when it was not) with each increase in dose potency.⁶⁹⁴

⁶⁹⁰ Ibid.: 293.

⁶⁹¹ Ibid.

⁶⁹² Herbert Moskowitz and Will McGlothlin, "Effects of Marihuana on Auditory Signal Detection," *Psychopharmacologia (Berlin)* 40, no. 2 (1974): 137.

⁶⁹³ Ibid.: 138.

⁶⁹⁴ Ibid.: 141.

De Souza et al. (1974) attained some interesting results examining pitch preferences under the influence of marijuana.⁶⁹⁵ In this study, 25 participants completed a test in which they were presented pairs of pitches, and asked to choose which sound they preferred. The subjects completed this test after taking a placebo, and 5, 10, 20, and 40mg doses of pure THC. The researchers found that subjects reliably preferred the highest pitched tones under the influence of higher doses of the marijuana.⁶⁹⁶

Lastly, Globus et al. (1978) conducted a complex study that examined elements of pitch memory and perception.⁶⁹⁷ It recruited 42 participants who were experienced marijuana smokers and gave them the task of learning a criterion tone of fixed loudness, and then reproducing the tone at the same amplitude from memory. Marijuana cigarettes that contained approximately 200ug/kg of THC were initially used for this study, but investigators soon found that the strength of this dosage overly impaired the functioning of participants, and began administering marijuana cigarettes containing approximately 125ug/kg of THC in subsequent sessions.⁶⁹⁸ Study participants were divided up into three groups who were given placebos and marijuana cigarettes at differing times in the test sessions.⁶⁹⁹ Subjects who were given marijuana early in the study, learned the amplitude of the tone under the influence of marijuana and were able to reproduce it relatively

⁶⁹⁵ Maria de Souza, Isac Karniol, and Dora Ventura, "Human Tonal Preferences as a Function of Frequency under Delta8-Tetrahydrocannabinol," *Pharmacology Biochemistry and Behavior* 2, no. 5 (1974): 507.

⁶⁹⁶ Ibid.: 610.

⁶⁹⁷ Globus et al., "Effects of Marihuana Induced Altered States of Consciousness on Auditory Perception."

⁶⁹⁸ Ibid.: 72.

⁶⁹⁹ The placebo used in this study was THC extracted marijuana. It is unclear if other cannabinoids would have remained in the placebo. Researchers at this time would be unaware of the effects of marijuana's other active ingredients.

accurately. The two groups who learned the amplitude under normal conditions, reproduced it with relative accuracy until they were given their dose of marijuana, at which point they began to reproduce the tone at considerably higher volumes.⁷⁰⁰ The researchers were not entirely certain what they should conclude from their results, as it was unclear if they were caused by a change in auditory perception or memory.⁷⁰¹ Notably, the group that learned the amplitude under normal conditions and received their dose of marijuana in the middle of the test session eventually began to reproduce the tone closer to its proper loudness an hour after receiving the drug. This could indicate that the observed effect occurs strongest at the onset of marijuana intoxication.

Unfortunately, the results of these positive studies do not provide a clear understanding of marijuana's effects, and are contradicted by some of the negative results in the previous section. Many of the studies that yielded positive results should ideally be revisited using more modern methodologies. Any follow-up studies would also benefit from the current political climate, which is arguably more hospitable to marijuana research than the contexts in which many of the aforementioned studies occurred.

Meneer 2015 Self-Report Study

The self-report studies I previously discussed in this chapter posited questions concerning music, but sought to make broad conclusions on the subject. Moreover, the

⁷⁰⁰ Globus et al., "Effects of Marijuana Induced Altered States of Consciousness on Auditory Perception," 73.

⁷⁰¹ Ibid.: 75.

language of the questions presented to participants in studies such as Goode (1970) and Tart (1971) was often vague, hyperbolic, or open to misinterpretation. For these reasons, I felt it important to conduct a self-report study that examined more specific questions about how marijuana effects the experience of music.

Methodology

A survey consisting of 26 multiple-choice questions was designed in consultation Prof. Catherine Caldwell-Harris from the Boston University Department of Psychology. The questions were worded in a manner that would allow them to be understood by individuals who had not received education in music. Moreover, participants were able to select an answer that indicated that they did not understand the question being asked. Due to the fact that marijuana is still illegal under U.S. federal law and the laws of many states, steps were taken to protect participants' anonymity. Respondents were not asked or given the opportunity to disclose information that could be used to identify them, or the date and location of their experiences with marijuana. Participants were required to state that they were 21 years of age or older, and indicate that they had some degree of previous experience with marijuana. The survey was conducted online using third-party research software licensed by Boston University, which was configured to not collect the I.P. addresses of those who completed the survey.

The survey questions were designed to assess basic aspects of participants' experience listening to music under the influence of marijuana. Specifically, they sought

to measure marijuana's impact upon an individual's perception and sensitivity to various facets of musical sound, such as tempo, volume, pitch register, and texture, as well as their emotional responses to music. This information was sought in hopes of better understanding how these changes may have influenced the creation and appreciation of psychedelic music.

Participants

Upon receiving exemption from the Boston University Institutional Review Board, the survey was brought online. It was promoted through Facebook and quickly began to garner participants, presumably due to popular interest in the topic of music and drugs. In all, 179 of respondents completed the entire survey; 181 completed a sufficient number of questions to be included in the final analysis.⁷⁰² Some basic demographic information was collected on each participant. Those who completed the survey were almost evenly split between genders (55% male, 45% female); 90% were between 21 and 41 years of age. They were also predominantly white (91% Caucasian) and had received some extent of post-secondary education. The majority (70%) reported having “extensive” experience with marijuana and 83% of them claimed to listen to their own music on a daily basis.

An attempt was made to identify other possible drugs that might be consumed in tandem with marijuana and possibly influence answers. As expected, many individuals

⁷⁰² The disparity between these two numbers is a result of some participants failing to complete the survey.

reported drinking alcohol while enjoying marijuana: 58% of respondents reported “usually” or “often” enjoying these two substances together. Upon examining the data, however, it seems that a respondent’s tendency to use alcohol with marijuana was not correlated with statistically meaningful deviations from the responses of those who consumed marijuana by itself.⁷⁰³ This suggests that participants who commonly enjoy marijuana with other substances still possessed some knowledge of marijuana’s effects independent from other drugs.

Results

Participants answered several questions that sought to confirm and refine the results found in other self-report studies. Many questions were also followed by a subsequent question that allowed participants who answered positively to indicate the intensity of their experience on a ten-point scale. The very first question addressed the general issues of auditory acuity:

Under the influence of marijuana, did your ability to hear sound seem to...

Improve (68%)
Stay the Same (28%)
Worsen (4%)

⁷⁰³ Respondent answers were grouped according to response regarding alcohol and marijuana consumption. Responses within each alcohol consumption group were then averaged. Comparing the average response by alcohol consumption level yielded very little differentiation of statistical significance across most questions. The only meaningful correlation found suggests that more experienced marijuana users are more likely to use alcohol and marijuana in tandem, than those with less marijuana experience.

Those who indicated that their hearing improved, on average rated the intensity of this effect at 6.3/10 in the follow-up question. Individuals who reported having “extensive” experience with marijuana reported improved hearing in higher numbers than the general pool (77%), yet their rating of the intensity of the effect was similar to other respondents (6.4/10). Participants were then asked about their perception of the speed of music under the influence of marijuana:

Under the influence of marijuana, did music ever sound...

Faster (1%)
Slower (18%)
Sometimes faster, sometimes slower (35%)
None of the above (46%)

As one can see, the answers reveal a lack of consensus on this question, though it would seem that very few people feel that music only seems faster on marijuana. Moreover, the one percent that did select this answer were all participants who did not commonly select and play music for their own enjoyment, and therefore *may* have been less skilled listeners. A very similar result was recorded on the question related to the volume of music:

Under the influence of marijuana, did music ever sound...

Louder (23%)
Softer (4%)
Sometimes louder, sometimes softer (30%)
None of the above (42%)

The survey inquired into participants' experience of pitch registers using simple language:

Under the influence of marijuana, was your hearing more sensitive to...

- High-pitched (treble) sounds (10%)
- Low-pitched (bass) sounds (16%)
- Both (47%)
- None of the above (23%)
- I don't understand what is being asked in this question (3%)

Though individuals seem to have differing sensitivities, these responses suggest that many individuals become more sensitive to pitches that are at the extremes of common pitch registers.⁷⁰⁴ An attempt was also made to measure participants' perception concerning their abilities to tease apart various sound sources in musical textures:

Under the influence of marijuana, did the sounds made by individual singers and/or instruments who were playing together ever seem...

- Less independent and discernible (7%)
- More independent and discernible (71%)
- None of the above (16%)
- I don't understand what is being asked in this question (7%)

This was perhaps the strongest positive result in the study, with a high number of respondents indicating that sounds became more independent and discernible, and rating the intensity of this effect on average at 6.8/10. Moreover, the consensus on this answer

⁷⁰⁴ Wording this question in an accessible manner was difficult. It is possible that some of the individuals who selected "both" were attempting to indicate that they had sensitivity to sounds across the entire pitch register (including those in the middle), instead of just at both extremes.

was even higher among the subset of individuals who reported extensive experience with marijuana. Of these respondents, 79% stated that instruments and voices were more discernible and on average rated this effect at 6.9/10 in intensity.

The very last question of the survey sought to explore participants' emotional responses to music while under the influence of marijuana:

Did you ever experience unusual emotional reactions to music under the influence of marijuana that you attributed to the effect of the drug?

Yes (67%)
No (21%)
I am not sure (12%)

Participants who answered positively to having unusual emotional reactions, and indicated that they were comfortable discussing them, were then asked two subsequent questions concerning their experiences. The first pertained to the aspects of music that they perceived to be the source of their emotional reaction:

How often were these unusual emotional reactions related to the lyrics or general subject matter of a song?

Most of the time (28%)
Sometimes (63%)
Not Often (16%)
Never (1%)

These answers suggest that the emotional reactions were not usually evoked by the music alone. On the second follow-up question, participants were asked to select the various unusual emotions they had felt:

Which of the following sentiments BEST describes the unusual emotional reactions you have experienced while listening to music under the influence of marijuana? (Check all boxes that apply)

Extreme happiness (66%)
Extreme sadness (39%)
Extreme contentment (53%)
Intense fear or anxiety (11%)
Intense anger (7%)
Strong feelings of love (62%)
Strong feelings of hate (4%)
Strong feelings of wonder or amazement (74%)
Strong feelings of connection or belonging (75%)
Other strong emotions that do not fit the above descriptions (39%)

As is apparent from the above results, the majority of the respondents who answered this final question indicated that their unusual emotional reactions to music while high were pleasant. Of particular note is that “strong feelings of wonder or amazement” and “strong feelings of connection or belonging” were by far the most common answers—even more so than “extreme happiness.”

Synopsis

In summary, the self-report study found that a significant majority of respondents (68%) believe their hearing improves under the influence of marijuana. Individuals with extensive experience with marijuana were even more likely to claim this effect (77%). Attempts to query the effect of the drug on perceptions of the speed and volume of music were largely inconclusive. Participants did, however, seem to report an increased sensitivity to sounds that were higher and lower in pitch. A significant majority of

individuals (71%) believed that they were better able to discern voices and instruments within a musical texture, and found the effect to be quite notable (6.8/10). This was especially true for individuals that had extensive experience with marijuana (79%, 6.9/10). A majority of respondents (67%) reported having unusual emotional responses while listening to music on marijuana. In most cases, this responses seem to be related to the lyrics or subject matter of the song. Most of the emotional reactions reported were pleasant in nature.

Effect of Marijuana on the Creative Process

Marijuana's relationship to creativity has received far less attention than that of LSD. This may be, in part, due to the fact that LSD enjoyed a decade of research in which questions that threatened to depict the drug in a favorable light could be safely asked. Conversely, scientific studies concerning marijuana have been contentious for most of the twentieth century. LSD's ability to provoke impressive visuals may also have been a compelling impetus for researchers to explore the drug's interaction with art. As discussed in the previous section on LSD and creativity, the act of creating music is often a complex, multi-stage process that may involve multiple individuals. In this way, there are many different opportunities and means for marijuana to influence the creation of a piece of music.

Self-Report Studies and Anecdotal Accounts

Performance

An enhanced ability to perform music is a notable facet of what Goode called the marijuana “mythology.” In his research into LSD and creativity, Stanley Krippner also collected some information on marijuana. Of the musicians Krippner surveyed, five preferred to smoke marijuana before performing, seven felt it impaired their performance, and the remaining fifteen didn’t think the drug made a difference.⁷⁰⁵ Unfortunately, Krippner does not include information concerning the style and instrument each musician played, which would be helpful for assessing both difficulty and reliance on improvisation. Concerning his own experience observing musicians play under the influence of marijuana, Krippner wrote:

Insofar as marijuana is concerned, the effects appeared to be somewhat different [from LSD], and highly variable from person to person. In general, I have detected neither an improvement nor a deterioration among musicians performing under the influence of marijuana.⁷⁰⁶

Improvisation

There have also been those who have claimed that marijuana enhances creativity in acts such as musical improvisation. In Harry Anslinger’s cautionary article *Marihuana: Assassins of Youth* from 1937, he quotes a jazz musician to have stated:

⁷⁰⁵ Krippner, “Psychedelic Drugs and Creativity,” 102.

⁷⁰⁶ Ibid.: 103.

Of course I use it—I’ve got to. I can’t play any more without it, and I know a hundred other musicians who are in the same fix. You see, when I’m “floating,” I own my saxophone. I mean I can do anything with it. The notes seem to dance out of it—no effort at all. I don’t have to worry about reading the music—I’m music-crazy. Where do I get the stuff? In almost any low-class dance hall or night spot in the United States.⁷⁰⁷

Saxophonist Milton “Mezz” Mezzrow makes a very similar claim concerning his own experience:

The first thing I noticed was that I began to hear my saxophone as if it was inside my head... Then I began to feel the vibrations of the reed much more pronounced against my lip and my head buzzed like a loudspeaker. I found I was slurring much better and putting just the right feeling into my phrases. I was really coming on. All the notes came easing out of my horn like they’d already been made up, greased and stuffed into the bell, so all I had to do was to blow a little and send them on their way, one right after the other, never missing, never behind time, all without an ounce of effort.⁷⁰⁸

Indeed, marijuana and jazz music have a shared history. In his autobiography, Dizzy Gillespie tells of his encounters with the drug upon coming to New York City:

When I came to New York in 1937, I didn’t drink nor smoke marijuana. “You gotta be a square muthafucka!” Charlie Shavers said and turned me onto smoking pot. Now, certainly, we were not the only ones. Some of the older musicians had been smoking reefers for 40 and 50 years. Jazz musicians, the old ones and the young ones, almost all of them that I knew smoked pot.⁷⁰⁹

⁷⁰⁷ Anslinger and Cooper, “Marijuana: Assassin of Youth.”

⁷⁰⁸ Harry Shapiro, *Waiting for the Man: The Story of Drugs and Popular Music* (New York, NY: Quartet Books, 1988), 31.

⁷⁰⁹ Dizzy Gillespie and Al Fraser, *To Be, or Not--to Bop* (Minneapolis, MN: University of Minnesota Press, 2009), 283.

Even in the Sixties across the country in San Francisco, stories of young musicians smoking up and improvising are commonplace.⁷¹⁰

Composition

Marijuana's influence upon premeditated aspects of music making, such as formal composition, is seldom discussed. Nevertheless, a musician interviewed for Grinspoon and Bakalar (1993) stated:

Over the years marijuana has served as a creative stimulant to my work as a performer and my more occasional inspirations as a composer. Almost all of my choral pieces and songs have been composed partly or wholly under the influence: melodic and rhythmic ideas just pop into my head during relaxed and happy moments—"points of creative release"—and these seminal ideas are formed into whole compositions over a period of days to years.⁷¹¹

Indeed, feelings of happiness and relaxation experienced on marijuana are among the most commonly cited effects of the drug.⁷¹² Moreover, many individuals feel that marijuana allows them to think differently. Tart found that many individuals considered themselves to be more original thinkers on marijuana:

Question 145:

The ideas that come to my mind when stoned are much more original than usual.

⁷¹⁰ The previously discussed extended jam sessions of Grace and Darby Slick, or Big Brother and the Holding company are perfect examples of this pastime.

⁷¹¹ Lester Grinspoon and James B. Bakalar, *Marihuana, the Forbidden Medicine* (New Haven, CT: Yale University Press, 1993), 96.

⁷¹² Bob Green, David Kavanagh, and Ross Young, "Being Stoned: A Review of Self-Reported Cannabis Effects," *Drug and Alcohol Review* 22, no. December (2003): 455.

Frequency of occurrence in respondents:

Never (5%), Rarely (7%), Sometimes (42%), Very Often (33%), Usually (8%)

No Answer/Other Answer (5%)

“How Stoned” respondents had to be to experience effect:

Just (6%), Fairly (32%), Strongly (41%), Very Strongly (7%), Maximum (3%)

No Answer/Other Answer (11%)

Participants in other studies also expressed a belief that their thinking improved. Of Goode’s participants, 31% believed that marijuana gave them the ability to “think deeper.”⁷¹³ Moreover, some participants in Halikas et al. (1985) listed a “heightened mental process.”⁷¹⁴ Further inquiry would have been necessary to state with certainty if the participants in these studies perceived these benefits to enhance their creativity.

Production

Marijuana’s perceived ability to improve or alter hearing has also made it a popular drug in the production process, especially in the final stages of mastering when individual tracks are being layered on top of each other and tweaked in an effort to achieve the perfect sound. Lindsey Buckingham, the former lead singer of Fleetwood Mac, described in detail his own experience of using marijuana in the production process:

[Marijuana is] not great for things like memory, but within the relative security of the studio, in the womblike atmosphere where I know what’s going on in there, it’s very helpful. It breaks down preconceptions you have about something; it allows you to hear it fresh. If you’ve been working on something for a few hours and you smoke a joint, it’s like

⁷¹³ Goode, *The Marijuana Smokers*, 153.

⁷¹⁴ Halikas et al., “A Longitudinal Study of Marijuana Effects,” 704.

hearing it again for the first time. You walk away for ten minutes and come back, and it allows you to keep coming back in for more and enjoy it. It seem to open up a lot of the right-brain stuff [...] For me, it's tied into a certain ability to visualize. It puts you way inside it. I would imagine if you smoke a joint, it's mildly psychedelic and it just puts you in touch with things. You journey inside. Things seem to come out of nowhere sometimes; it throws you a bit. You have to get unsure of yourself if you're going to break down preconceptions, if you're going to feel out of control. You're never going to do a good piece of work if you're just imposing your ego on something.⁷¹⁵

Buckingham's verbose account is anecdotal, but reveals the utility of several of marijuana's effects to record producers. The first is being able to hear the music with a certain freshness, which presumably relates to the common perception of increased auditory acuity on marijuana. His references to being able to visualize his music may refer to some form of synesthetic experience, or possibly a less synchronized experience of visualized sound. Lastly, his reference to feeling "inside the sound" and experiencing it with a diminished sense of self seem to reference the depersonalization effect. Another benefit to producers hearing their music while high, which is not mentioned by Buckingham, is the simple fact that they are experiencing the sounds of their records in the state in which many of their listeners will enjoy them.

Studies on Divergent Thinking

Many of the studies concerning marijuana's relationship to creativity focus on changes in *divergent thinking*, which may be simply explained as the ability to generate

⁷¹⁵ Boyd, *Musicians in Tune: Seventy-Five Contemporary Musicians Discuss the Creative Process*, 200-01.

multiple relevant solutions to an open-ended problem. Divergent thinking is of particular interest to researchers studying schizophrenia, as individuals who show susceptibility to the illness often demonstrate a higher degree of this ability.⁷¹⁶

Weckowicz et al. (1975) was among the first studies to investigate marijuana's effects on divergent thinking.⁷¹⁷ In the study, 21 participants were randomly assigned into a four groups: a low dose group that received a marijuana cigarette containing approximately 3mgs of THC, a high dose group that received a marijuana cigarette containing approximately 6mg of THC, a placebo group, and a control group. Participants in all four groups complete an array of cognitive tests. Notably, on the tests designed to measure divergent thinking, specifically Guilford's Divergent Production Tests, participants on low doses of marijuana achieved the highest scores and those on high doses achieved the lowest.⁷¹⁸ This led the investigators to conclude that low doses of marijuana may possess the ability to enhance divergent thinking.⁷¹⁹

Several follow-up studies attempted and failed to achieve similar results. Tinklenberg et al. (1978) conducted a study that administered 300ug/kg of pure THC to subjects completing The Torrance Tests of Creative Thinking, which were a popular successor to the Guilford tests used by Weckowicz.⁷²⁰ Yet researchers found no

⁷¹⁶ Kyle S. Minor et al., "Predicting Creativity: The Role of Psychometric Schizotypy and Cannabis Use in Divergent Thinking," *Psychiatry Research* 220, no. 1-2 (2014): 205.

⁷¹⁷ Thaddeus Weckowicz and et al., "Effect of Marijuana on Divergent and Convergent Production in Cognitive Tests," *Journal of Abnormal Psychology* 84, no. 4 (1975): 386.

⁷¹⁸ *Ibid.*: 393.

⁷¹⁹ *Ibid.*: 386.

⁷²⁰ J Tinklenberg and et al., "Marijuana's Effects on Associations to Novel Stimuli," *The Journal of Nervous and Mental Disease* 166 (1978): 362.

statistically significant difference in the performance of participants completing these tests under the influence of THC.⁷²¹ Similarly, Bourassa and Vaugeois (2001) sought to measure divergent thinking in 120 participants, 60 of which were regular users of marijuana and the other 60 novice users.⁷²² All participants completed an abridged version of the Torrance Tests under three conditions: without marijuana, after smoking a marijuana placebo cigarette, and after smoking a marijuana cigarette containing approximately 10mg of THC. The study found that marijuana did not change the divergent thinking ability of novice users, but decrease this ability in participants who were experienced users.⁷²³ In the last year, Kowal et al. (2014) engaged this subject using more rigorous and detailed contemporary methodology and analysis.⁷²⁴ In this study, 57 participants who were regular users of marijuana were divided into three groups that would each complete two series of modern tests designed to measure creativity and divergent thinking: Remote Associates Tests (RAT) and the Alternate Use Tests (AUT). One of the groups completed these tests under the influence of a placebo, the other two received vaporized doses of marijuana containing 5.5mg and 22mg of THC respectively.⁷²⁵ The groups that received the placebos and lower doses of marijuana completed the RAT and AUT with a similarly level of proficiency, though the

⁷²¹ Ibid.: 364.

⁷²² Maurice Bourassa and Pierre Vaugeois, "Effects of Marijuana Use on Divergent Thinking," *Creativity Research Journal* 13, no. 2 (2001): 411.

⁷²³ Ibid.: 415.

⁷²⁴ Mikael A. Kowal et al., "Cannabis and Creativity: Highly Potent Cannabis Impairs Divergent Thinking in Regular Cannabis Users," *Psychopharmacology* (2014).

⁷²⁵ Ibid.

participants in the group that received the high dose of marijuana performed significantly worse.⁷²⁶

In summary, laboratory studies that have attempted to measure marijuana's effect on creativity have been largely unable to evidence claims made on self-report studies that the drug can enhance aspects of creative thinking.⁷²⁷ Moreover, individuals seem to perform lower on many creativity measures at very high doses of marijuana.

THE VARYING ROLES OF MARIJUANA AND LSD

While LSD and marijuana both influenced the psychedelic music of the Sixties, I believe they did so in very different ways. For the average person who tried them, LSD and similar psychedelics were powerful drugs that allowed the individual to experience music in new and sometimes spectacular ways. Moreover, the powerful effect of depersonalization enabled people to connect more intimately with music and their fellow human beings who create and enjoy it.

Few people take LSD and other powerful psychedelics on a regular basis.⁷²⁸ I believe there are two principal reasons for this. The first is the simple fact that LSD provides a very powerful experience that even when wonderful is often psychologically

⁷²⁶ Ibid.

⁷²⁷ Three other additional studies that explore the issue of divergent thinking in relation to the chronic—not acute—effects of marijuana are: Katy A. Jones, M. Blagrove, and A. C. Parrott, "Cannabis and Ecstasy/MDMA: Empirical Measures of Creativity in Recreational Users," *Journal of Psychoactive Drugs* 41, no. 4 (2009). G. Schafer and et al., "Investigating the Interaction between Schizotypy, Divergent Thinking, and Cannabis Use," *Consciousness and Cognition* 21 (2012). Minor et al., "Predicting Creativity: The Role of Psychometric Schizotypy and Cannabis Use in Divergent Thinking."

⁷²⁸ Trevor Bennett and Katy Holloway, *Understanding Drugs, Alcohol and Crime* (New York, NY: McGraw-Hill, 2005), 67.

exhausting. The second is that the insights one gains through LSD usually remain with those who are intent to keep them. Even the drug's most enthusiastic supporters have been known to reach a point where they no longer feel the need to take it. Ken Kesey was one such supporter, another was Alan Watts who famously remarked on the subject:

If you get the message, hang up the phone. For psychedelic drugs are simply instruments, like microscopes, telescopes, and telephones. The biologist does not sit with eye permanently glued to the microscope, he goes away and works on what he has seen.⁷²⁹

In this way, I believe it is most accurate to characterize the impact of LSD and other powerful psychedelics on Sixties music as *inspirational* in nature. With exceptions, LSD's relationship with music was far less frequent and intimate than that of marijuana and alcohol, which have been commonly consumed in tandem with music throughout the twentieth century. Nevertheless, looking back on statements given by Oscar Janiger's artists, it is evident that LSD has the capacity to fundamentally change the way an artist looks at his or her art form.⁷³⁰ In this respect, I believe LSD played an important role in the transformation of popular artists into creators of unorthodox pieces of abstract music.

Conversely, marijuana was an intimate companion to psychedelic musicians and their appreciators in the Sixties. It was and still is a far more popular drug than LSD and similar psychedelics.⁷³¹ This is due to its accessibility, but also the fact that its more subdued effects are less likely to elicit an unpleasant experience. It is also a drug that many people are able to enjoy on a daily basis. Indeed, the mention of marijuana use at

⁷²⁹ Alan Watts, *The Joyous Cosmology: Adventures in the Chemistry of Consciousness* (New York, NY: Vintage Books, 1965), 26.

⁷³⁰ Dobkin de Rios and Janiger, *LSD, Spirituality, and the Creative Process*, 96-100.

⁷³¹ Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence*, 53.

social gatherings, rehearsals, performances, and recording sessions is abundant in historical accounts.⁷³² Marijuana's intimacy with music can also be attributed to the fact that many people believe it enhances their hearing. This increase in auditory acuity is very different from the purported effects of LSD, which often evolve around the music interacting with other senses, perceptions, and emotions. Put simply, whereas LSD and other psychedelics seem to embellish the experience of sound for users, marijuana enhances their ability to hear *more* sound. Moreover, as documented in this chapter, many musicians perceive marijuana to enhance improvisation.

Laboratory studies have struggled to demonstrate the ways in which marijuana enhances hearing and music appreciation. My own belief is that marijuana allows individuals under its influence to better follow individual sound sources through an enhanced appreciation of tone color. Notably, many of the research studies done in labs were conducted using sine waves that lack the overtones of most instruments and naturally occurring sounds. As such, it is notable that the most significant positive result among the aforementioned studies was the Speech Discrimination test in Thaler et al. (1973), which required participants to discern words spoken by a human voice.⁷³³

Scientific studies have also been largely unable to support self-report claims of enhanced creativity under both marijuana and LSD. One of the challenges researchers face in investigating this issue is understanding the complexities of the abilities that are

⁷³² To briefly support my point, in the Grateful Dead biography *Long Strange Trip* (2007) the words "stoned," "pot," "weed," "marijuana," and "grass," appear 101 times over 704 pages. Similarly, in the Jefferson Airplane biography *Got a Revolution!* (2003), these words appear 34 times over 407 pages. In my experience, neither of these books are atypical of Sixties rock biographies.

⁷³³ Fitzpatrick and Thaler, "Marihuana and Hearing."

commonly described as “creative.” While both are termed creative acts, it stands to reason that painting a picture that bears “artistic merit” is a very different task from using one’s problem-solving abilities to generate multiple solutions to a written problem. For this reason, many psychologists and neuroscientists have sought to better understand the various psychological processes and abilities that contribute to creativity, such as executive functioning and various forms of intelligence.⁷³⁴ Further attempts to correlate self-report studies with standardized tests on this issue will hopefully benefit from greater specificity in both approaches. I also believe that researchers—following the descriptions of individuals who have used these drugs—have often sought evidence of superior performance. Again, my personal opinion is that these substances do not make an individual think *better*, but *differently*. Put differently, few people will claim to see better under a black light, yet one may notice features of his or her environment that were not apparent under normal lighting conditions. In this way, while an individual on psychoactive drugs may devise fewer solutions to a problem on a divergent thinking test, the change is nevertheless of interest if *any* of the solutions they produce are enabled by their altered state.

⁷³⁴ See Mathias Benedek et al., “Intelligence, Creativity, and Cognitive Control: The Common and Differential Involvement of Executive Functions in Intelligence and Creativity,” *Intelligence* 46.

CHAPTER 4

PSYCHO-AESTHETIC ANALYSIS OF PSYCHEDELIC MUSIC

UNDERSTANDING PSYCHEDELIC MUSIC THROUGH THE EFFECTS OF PSYCHEDELIC DRUGS

In his book *Sixties Rock* (1999), Prof. Michael Hicks examined the aesthetic of psychedelic music in relation to certain effects of psychedelic drugs, specifically depersonalization (a diminished sense of self or ego), dechronicization (the distortion of time); and dynamization (hallucinated distortions of familiar or imagined objects).⁷³⁵ It is this novel approach that inspired the following analysis.

In this chapter, I expand upon Hicks's approach, but also suggest an additional means through which this music can be understood through the subjective effects of substances. Hicks approached the relationship between the genre's common aesthetic features and the effects of drugs from a strictly emulative perspective—musical sounds depicting and evoking certain aspects of the psychedelic experience. I believe, however, that many of the aesthetic features of psychedelic music may also *enhance* the listening experience for individuals who enjoy them while on psychedelic drugs.⁷³⁶ To support this belief, I explore the aesthetic through an expanded list of subjective drug effects drawn from the research detailed in the previous chapter. Some of the enhancements I propose between psychedelic drugs and psychedelic music is analogous to the relationship between a pair of 3D glasses and a 3D movie. While one may watch the 3D movie without the glasses, the two components are designed to interact with each other to

⁷³⁵ Hicks, *Sixties Rock: Garage, Psychedelic, and Other Satisfactions*, 63.

⁷³⁶ There are also a few musical features of psychedelic music that Hicks relates to depersonalization, which I believe are better understood through certain spatial effects of psychedelic drugs (See Hintzen 131).

embellish the experience of viewing for the spectator. I also speculate that psychedelic drugs could enhance certain psychological aspects of music cognition through a *compounding* process wherein a subjective effect shared between a piece of music and a drug is intensified through the combined influence of both elements.

Without question, the practice of discussing the aesthetic features of a piece of music and surmising how individuals experience them is speculative. Indeed, the fields of ethnomusicology and music cognition have demonstrated the degree to which a human being's experience of sound and music is highly subjective.⁷³⁷ Furthermore, the field of psychiatry holds that an individual's response to a psychoactive drug is highly dependent upon their "set" (psychological predisposition) and "setting" (physical and social environment).⁷³⁸ Hence to surmise a listener's experiences using the effects of psychedelics drugs is to posit a relationship between two highly subjective experiences.

Many of the arguments in this chapter are admittedly speculative in nature, and rest on the idea that certain subjective experiences of music enhance, emulate, or otherwise play into certain subjective experiences of drugs. My hope in sharing this psycho-aesthetic perspective on psychedelic music is to identify ways in which this music might have been experienced in the Sixties, but also to suggest a way in which this music *could* be appreciated today.

⁷³⁷ See Bruno Nettl, *The Study of Ethnomusicology: Thirty-One Issues and Concepts*, New ed. (Urbana, IL: University of Illinois Press, 2005), 42-74. Aniruddh Patel and Steven M. Demorest, "Comparative Music Cognition: Cross-Species and Cross-Cultural Studies," in *The Psychology of Music*, ed. Diana Deutsch (San Diego: Academic Press, 1999).

⁷³⁸ Norman E. Zinberg, *Drug, Set, and Setting: The Basis for Controlled Intoxicant Use* (New Haven, CT: Yale University Press, 1984).

The previous chapter identified several self-report studies on the effects of LSD and marijuana, and discussed many of the effects that could relate in some respect to the experience of music. Some of these effects have been excluded from the discussion below as they are too variable to meaningfully include them in the following analysis. I have also added one of Hicks's original effects, *dynamization*. Dynamization is a term coined by Timothy Leary, which he described as the capacity of psychedelic drugs to make "familiar forms dissolve into moving structures."⁷³⁹ With both dynamization and synesthesia, it is arguably impossible to posit specific musical features that could trigger or enhance these effects in a listener who is under the influence of a psychedelic drug. There are, however, some features of psychedelic music and the environment in which it was performed that *emulated* these effects. These two effects are therefore discussed in a solely emulative or representational capacity. Others, such as heightened auditory acuity, are discussed primarily in the context of enhancing the listener's experience under the influence of drugs. In all, this chapter will examine the possible relationship of the following six effects of psychedelic drugs with certain aesthetic features of psychedelic music: dechronicization, synesthesia, depersonalization, dynamization, heightened auditory acuity, hypersuggestibility, and altered spatial awareness.

⁷³⁹ Timothy Leary, "The Experiential Typewriter," *Psychedelic Review* 7 (1966): 80.

SELECT EFFECTS OF PSYCHEDELIC DRUGS AND THEIR POSSIBLE RELATIONSHIP WITH AESTHETIC FEATURES OF PSYCHEDELIC MUSIC

The following is a brief summary of my theories concerning how specific musical features could emulate or enhance the aforementioned effects of psychedelics drugs. In the following section of this chapter, I will apply these theories to three songs that will serve as case studies for my arguments.

Dechronocization

Dechronicization, or the experience of an altered sense of time, is a common psychological effect under both marijuana and more powerful psychedelics like LSD.⁷⁴⁰ In most cases, this effect is experienced as a dilation of perceived time.⁷⁴¹ For many individuals, music also possesses the power to prolong, shorten, or even make meaningless the passage of time. Discussing such experiences in psychedelic music, Darby Slick stated:

When music is really happening, it creates a new world, or even a new universe. Time, in the normal sense, seems to disappear, and the “now” opens up and becomes all pervasive.⁷⁴²

Similarly, discussing the genre “Country Joe” McDonald of Country Joe and the Fish commented:

⁷⁴⁰ The effects of psychoactive drugs that are referenced in this chapter are discussed at length and evidenced in the previous chapter.

⁷⁴¹ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 132.

⁷⁴² Slick, *Don't You Want Somebody to Love: Reflections on the San Francisco Sound*, 61.

The music slowly segues one thing into another, but the sections aren't clearly defined, and in the imagery and the way the instruments interplay with each other...there's a timeless feel.⁷⁴³

Scientific studies have shown that music and other sound stimuli also have the capacity to alter one's experience of time. On a general level, researchers have long noted that auditory stimuli tends to be perceived to last longer than visual stimuli of the same duration.⁷⁴⁴ Studies have also shown that auditory stimuli that is loud will often be perceived to last longer.⁷⁴⁵ Indeed, many psychedelic artists in the Sixties—especially the 13th Floor Elevators—were known for playing incredibly loudly.⁷⁴⁶ There are also specific musical features in psychedelic music that are capable of affecting a listener's perception of time, though the exact nature and strength of this influence depends on many factors. Contemporary understanding of time perception holds that intervals of time that contain a large number of new stimuli will be perceived to pass slower than those with fewer novel events.⁷⁴⁷ Additionally, the perceived passage of time is also affected by one's expectations regarding the duration and order of events. Jones and Boltz (1989) demonstrated that a musical passage that endures beyond a listener's expectations will usually be perceived to be much longer than it actually was, whereas a musical passage

⁷⁴³ William Ruhlmann, "Country Joe McDonald Is Superstitious, but He Hasn't Quit Yet," *Relix*, June 1991, 8.

⁷⁴⁴ J Wearden, N Todd, and L Jones, "When Do Auditory/Visual Differences in Duration Judgements Occur," *The Quarterly Journal of Experimental Psychology* 59, no. 10 (2006): 1709.

⁷⁴⁵ William J. Matthews, Neil Stewart, and John H. Wearden, "Stimulus Intensity and the Perception of Duration," *Journal of Experimental Psychology: Human Perception and Performance* 37, no. 1 (2010): 303.

⁷⁴⁶ Charles T. Brown, *The Art of Rock and Roll*, 3rd ed. (Englewood Cliffs, NJ: Prentice-Hall, 1992), 145; Drummond, *Eye Mind: The Saga of Roky Erickson and the 13th Floor Elevators*, 157.

⁷⁴⁷ Scott W. Brown, "Time and Attention: A Review of the Literature," in *The Psychology of Time*, ed. Simon Grondin (Bingley, UK: Emerald Group, 2008), 116.

that seems to end prematurely is likely to be perceived as shorter than its actual duration.⁷⁴⁸ Under this principle, some features of the aesthetic of psychedelic music can be understood to either emulate or *compound* the dechronicization effect of drugs. Psychedelic music, especially that which was produced in the studio, was notable for its inclusion of unexpected and unusual sounds. If such sounds succeed in capturing the listener's attention, the perceived duration of the song may be lengthened by the novel stimulus. Other time-distorting features of the music could either shorten or lengthen perceived time depending on the listener's expectations. For instance, the constant presence of a Tanpura drone in a psychedelic song could arguably speed the experience of time for some listeners by serving as a static, predictable point of attention, but would lengthen it for those who expected the instrument to fade out much sooner. The same is true for the duration and structure of many psychedelic songs, which were often much longer in duration than previous popular music hits and sometimes employed atypical forms. This was especially true in a live context where performers would often improvise for long stretches of time, and in some instances refrain from structuring their performance into traditional sets and songs.⁷⁴⁹ For listeners whose expectations were defied by the longer length of these performances, the experience of time may have been dilated. Similarly, the experience of stretched time may have been felt by those whose attention was constantly being demanded by the novel, and unpredictable musical stimuli that would often flow out of the prolonged jam sessions on stage.

⁷⁴⁸ See M Jones and M Boltz, "Dynamic Attending and Responses to Time," *Psychological Review* 96 (1989).

⁷⁴⁹ Wolfe, *The Electric Kool-Aid Acid Test*, 240.

Synesthesia

As previously mentioned, it is impossible to speculate which musical sounds—if any—have the capacity to elicit synesthesia. While further self-report data is needed to determine if there is any correlation between individual experiences, there are several ways in which live performances of psychedelic music in the Sixties emulated synesthetic experiences. As discussed in chapter two, psychedelic music concerts were often multimedia experiences filled with film and light shows of molten color.⁷⁵⁰ Moreover, the extreme volumes at which psychedelic music was often performed meant that it could be felt by the audience as well as heard. Remarking on this feature, critic Charles T. Brown stated:

The music is meant to be felt rather than just heard, and anyone who has ever attended a performance of an acid group knows that it can be felt. Amplifiers are turned up to the breaking point, and there is a great deal of created distortion.⁷⁵¹

In this way, the tactile sensation of the sound and visual sensations of the film and light shows emulated the kind of multi-sensory experience an individual can have with synesthesia.

⁷⁵⁰ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 53.

⁷⁵¹ Charles T.N Brown, *The Art of Rock and Roll* (Englewood, NJ: Prentice Hall, 1992), 148.

Depersonalization

The multimedia experience of psychedelic music performances may have also emulated or enhanced feelings of depersonalization in audiences. Anthropologists have long appreciated what they term “liminal” stages within cultural rituals. Commenting on this experience, Charles T. Brown wrote:

The function of acid rock is to provide a stimulus for the total experience of the people involved, musicians and audience alike [...] The entire crowd and band become part of the musical and physical experience [...] It is the total art work that is important, not any one constituent part.⁷⁵²

Taken from the Latin word for “threshold,” the liminal stage of a ritual refers to the point at which an individual loses his or her pre-ritual identity and adopts a group identity.⁷⁵³ In the context of a musical performance, this liminal stage occurs when participants become immersed in the ambience of their surroundings and begin to feel a sense of oneness with those around them who are having the same sensory experiences. It is this sense of connectedness that seems to have defined many of the influential live events that happened in San Francisco during the mid-Sixties.⁷⁵⁴

There were also several aspects of the music itself that could be seen to enhance or emulate feelings of group identity. As discussed in chapter two, a prominent feature of psychedelic music was its incorporation of prolonged passages of group improvisation. Many musicians let these passages unfold as freely and organically as possible, with

⁷⁵² Ibid.

⁷⁵³ Mike Morris, “Liminality,” in *Concise Dictionary of Social and Cultural Anthropology* (Malden, MA: Wiley-Blackwell).

⁷⁵⁴ I discuss these events at length in chapter two of this dissertation. The series of concerts run by the Family Dog commune in the fall of 1965 are excellent examples of this community sentiment.

several instruments playing melodic lines simultaneously. In an interview with Craig Morrison, Sam Andrew of Big Brother and the Holding Company discussed his former band's affinity for this practice:

Usually in a band you get a real structured approach because they've been around the block and they know who the lead player is and who the rhythm is, but we didn't know that. We didn't even know there was a lead and rhythm player. It was just everybody going for it at the same time [...] Everybody had their freedom.⁷⁵⁵

In his book, Michael Hicks refers to this practice as “democratic counterpoint.”⁷⁵⁶ He also notes that interactions between these instruments and their players were often free of competitive sentiments. These jam sessions differed greatly from the traditional rock solos, which are often perceived as an expression of a single performer's individualism.⁷⁵⁷ Instead, these players sought a musical synergy that connected them in a manner similar to drug-induced depersonalization. This dynamic is also strikingly similar to the freeform jams played by the Merry Pranksters as early as 1964. On the *The Acid Test* LP recorded by the Pranksters, Ken Kesey attempts to explain the concept of synchronicity to his listeners. As he speaks, Ken Babbs can be heard playing a harmonica in the background, which Kesey references to illustrate the concept through music:

Like playing a harmonica that is going nowhere, that at any moment you can add to it your own kind of noise, and it's part of it. This is different from Beethoven's 5th which is finished.⁷⁵⁸

⁷⁵⁵ Morrison, “Psychedelic Music in San Francisco: Style, Context, and Evolution”, 76.

⁷⁵⁶ Hicks, *Sixties Rock: Garage, Psychedelic, and Other Satisfactions*, 65. Hicks credits the term “democratic counterpoint” to Steve Johnson.

⁷⁵⁷ See André J. Millard, ed., *The Electric Guitar: A History of an American Icon* (Baltimore, MD: Johns Hopkins University Press, 2004).

⁷⁵⁸ Kesey, *The Acid Test*.

Notably, for musicians like Jerry Garcia and his bassist Phil Lesh, the connectedness they experienced through the performance of psychedelic music was intimately related to the powerful psychological bond they experienced through LSD.⁷⁵⁹ Describing the early days of this connection Phil Lesh wrote:

Musically we had come so far so fast that Jerry and I were trying to expand our musical language into new rhythmic and harmonic realms [...] Jerry and I were operating in an acid-fueled collective mind field.⁷⁶⁰

Dynamization

Dynamization is the term Leary used to describe the capacity of psychedelic drugs to make familiar forms change or “come to life.”⁷⁶¹ The most common example of this effect is the extraordinary visuals one often experiences under powerful psychedelic substances like LSD, which can range from the distortion of objects into molten forms to outright hallucinations. There are many ways in which psychedelic music emulated such experiences. On dynamization, Hicks writes in his book:

More than anything else, psychedelic music dynamized musical parameters previously stable in rock. Psychedelic drugs transformed fixed shapes into shifting forms. In turn, psychedelic rock activated the music’s essential form, harmony, timbre, articulation, and spatial deployment.⁷⁶²

⁷⁵⁹ McNally, *A Long Strange Trip: The inside History of the Grateful Dead*, 106.

⁷⁶⁰ Phil Lesh, *Searching for the Sound: My Life with the Grateful Dead*, 1st ed. (New York, NY: Brown, 2005), 135.

⁷⁶¹ Leary, “The Experiential Typewriter,” 80.

⁷⁶² Hicks, *Sixties Rock: Garage, Psychedelic, and Other Satisfactions*, 66.

Many psychedelic artists employed unorthodox forms and harmonies in their music, venturing far beyond traditional verse-chorus structures and adding colorful extensions to their harmonies.⁷⁶³ Psychedelic music was also renowned for its use of bending pitches. The instrument most idiomatically suited for this practice was the electric guitar, which allowed a musician to easily bend strings with his or her fingers, or fluctuate the sound of the entire instrument using a whammy bar or bottleneck. Moreover, the sound of any electric instrument could be run through a variety of special effects pedals that were capable of altering the timbre, volume envelope, and pitch of the instrument. Keyboard instruments, such as the Moog or Buchla synthesizers and the Mellotron, were also capable of producing and distorting a vast range of sounds. Even acoustic instruments in psychedelic music were sometimes modified to produce unusual sounds. Percussionists, for instance, would sometimes slacken the skins of their drums to get a different tone.⁷⁶⁴ Many of the melodic lines in psychedelic music could also be very dynamic—especially those played by instruments. Whereas traditional rock and roll relied heavily upon major scales and pentatonic modes, psychedelic music often employed exotic varieties of minor scales that evoked notions of exoticism in the Western ear.⁷⁶⁵ Even artists who commonly played in more traditional scales often enjoyed adding additional notes to them in order to embellish their lines.⁷⁶⁶ The lines of psychedelic bassists such as Phil Lesh, Peter Albin, and Ray Manzarek (keyboard bass) were often extremely active and melodic in nature,

⁷⁶³ Ibid., 67.

⁷⁶⁴ Ian MacDonald, *Revolution in the Head: The Beatles' Records and the Sixties* (London, UK: Fourth Estate, 1994), 192.

⁷⁶⁵ The melodies played by Doors guitarist Robbie Krieger are a great example of this practice.

⁷⁶⁶ Jerry Garcia and Jimi Hendrix are classic examples of this practice. Most of their guitar melodies are built upon major, mixolydian, and pentatonic scales, but have other notes added for the purpose of color.

straying from the instrument's traditional role of reinforcing rhythmic and harmonic structure.

In many respect, it can be argued that the core essence of psychedelic music was the avoidance of "familiar structures." As a genre, it generally desired to be sensually pleasing, not weird or shocking to its listeners, but formulaic sounds and styles were the antithesis of its ideals.

Heightened Auditory Acuity

Heightened auditory acuity can be experienced with several psychedelic drugs, but seems to be appreciated most consistently with marijuana. For this reason, the following discussion—while possibly applicable to other psychedelics—is specifically related to marijuana and its effects.⁷⁶⁷ There are many features of psychedelic music that seem to cater specifically to the altered auditory sensibilities of the high listener. In this respect, the following observations relate primarily to the enhancement of musical experiences for individuals under the influence of this substance. Data from the self-report study conducted for this dissertation suggested some commonalities in the way many individuals feel their listening changes on marijuana.⁷⁶⁸ A large portion of respondents stated that they became more sensitive to sounds at both ends of the audible frequency spectrum (treble and bass). Psychedelic music catered to both high and low

⁷⁶⁷ Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*, 71. ; See other studies discussed in previous chapter.

⁷⁶⁸ See previous chapter for details on this study.

pitch registers in several ways. In the treble register, shrill sounds from tambourines, jangly guitar tones, piercing organ drones, and amplifier feedback are common features on tracks. Artists such as the Beatles even enjoyed nesting ultra-high frequency tones in studio works such as “She Said She Said” and “A Day in the Life.”⁷⁶⁹ Many of the reverb-rich production aesthetics of the Sixties also tended to augment high-frequency sounds to seemingly capitalize on the capabilities of modern sound equipment. In the bass register, most psychedelic songs featured bass guitar lines that were louder, more prominent, and more active than traditional rock songs.⁷⁷⁰ Artists such as the Beatles and Brian Wilson would also add fullness and interest to the bass register by incorporating low brass instruments into their songs.

Respondents in the self-report study performed for this dissertation, as well as those in previous studies, have also commonly reported an increased ability to discern individual instruments and voices within a musical texture.⁷⁷¹ Here too, psychedelic music engages the listener’s altered sensibilities. In the studio, many psychedelic artists and their producers were very keen to use—and in some cases over use—the incredible advances in multi-tracking technology that occurred in the Sixties. Albums such as Brian Wilson’s *Pet Sounds* (1966) or the original mix of the Grateful Dead’s *Aoxomoxoa* (1969) gave listeners complex layers of sound to discern and appreciate in their altered

⁷⁶⁹ The Beatles, *Revolver*; ———, *Sgt. Pepper's Lonely Hearts Club Band* (Parlophone PMC 7027, LP, 1967).

⁷⁷⁰ For example, “Section 43” from Country Joe and the Fish, *The First Three Eps*.

⁷⁷¹ Tart, *On Being Stoned: A Psychological Study of Marijuana Intoxication*.

states.⁷⁷² Psychedelic music created in the studio also teased the drugged listener through fleeting sounds that are buried deep within the mix of the master track.⁷⁷³ These sounds are often very difficult to hear and can sometimes only be heard by keen listeners with high-fidelity equipment. All of these features would have made psychedelic music an especially engaging listening experience for someone who is under the influence of marijuana.

Hypersuggestibility

Hypersuggestibility is an effect that is commonly experienced on powerful psychedelics like LSD, and increases an individual's susceptibility to having their thoughts be controlled by external stimuli. Psychedelic music played upon this effect in two ways, both of which can be understood as means of either emulating or enhancing the experience of psychedelic drugs. The first was through its use of language. Several psychedelic songs contained lyrics that spoke directly to the listener. In some instances, the lyrics of psychedelic songs were instructive, such as John Lennon's famous imperative "turn off your mind, relax, and float down stream" from "Tomorrow Never Knows."⁷⁷⁴ Others attempted to immerse the listener in descriptive accounts of experiences, such as Grace Slick's hypnotic invocation from "Two Heads":

⁷⁷² The Beach Boys, *Pet Sounds*. ; The Grateful Dead, *Aoxomoxoa* (Warner Bros. - Seven Arts Records WS 1790, LP, 1969).

⁷⁷³ These sounds can be found on many of the more playful Beatles songs from 1967 forward, as well as Jefferson Airplane albums such as *After Bathing at Baxter's* (1967) and *Crown of Creation* (1968).

⁷⁷⁴ The Beatles, *Revolver*. ; Lennon lifted this line from Leary, Alpert, and Metzner's *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead* (1964).

You want two heads on your body
And you've got two mirrors in your hand
Priests are made of brick with gold crosses on a stick
And your nose is too small for this land
Inside your head is your town
Inside your room your jail
Inside your mouth the elephants trunk and booze,
The only key to your bail.⁷⁷⁵

These lyrics speak directly to the listener and attempt to persuade him or her to imagine or adopt feelings, environments, or states of being.

Some of the aforementioned fleeting sounds in studio music can also be understood to play into this effect. While these sounds could be simple instrumental expressions, it was also common for them to be sounds depicting certain environments, things, or activities. Perhaps the best illustration of this practice is the Jefferson Airplane song "Lather" from the album *Crown of Creation* (1968). In this song, Grace Slick sings a story about a young man named Lather. As she sings through the narrative, things described in the lyrics are depicted with sounds in the background: "newspaper clippings" is accompanied by the sound of scissors, "bank" by the sound of a typewriter, and "tank" accompanied by the sound of an explosion.⁷⁷⁶

⁷⁷⁵ Jefferson Airplane, *After Bathing at Baxter's* (New York, NY: RCA Victor LOP 1511, LP, 1967).

⁷⁷⁶ Other examples include the host of sounds featured in the Beatles' song "Yellow Submarine" on *Revolver* (1966) and the rainstorm backing track on the Doors' "Riders on the Storm" on *L.A. Woman* (1971).

Altered Spatial Awareness

Powerful psychedelics like LSD have the capacity to significantly alter one's sense of spatial awareness.⁷⁷⁷ Psychedelic music produced in the studio commonly played with listeners' spatial senses with regard to the perceived geographical origins of sounds. This practice can be understood to either emulate an altered perception of space or further compound it for a listener who is under the influence of a psychedelic drug. Producers in the Sixties created this effect in several ways. They took advantage of new stereo technology to give their listeners the illusion that sounds were originating from a specific direction. To create the illusion of distance, they would adjust the volume and filter the frequencies of sounds. These techniques enabled producers in the era to create a spatial soundscape in which listeners could perceive both an instrument and its location.⁷⁷⁸ Producers of psychedelic music were often very adventurous in their placement and movement of sounds within these virtual spaces: sounds could pan quickly across the listener's horizon, or jump from a distant location to one that feels very close to the listener's face. A great illustration of these capabilities occurred in "Bird Song" off the 1968 psychedelic folk album *The Moray Eels Eat The Holy Modal Rounders* by the Holy Modal Rounders. On this track, a listener wearing headphones will perceive the main vocal track to fly around his or her head at varying proximities much like a soaring

⁷⁷⁷ Hintzen and Passie, *The Pharmacology of LSD: A Critical Review*, 132.

⁷⁷⁸ The Merry Pranksters were also big fans of playing with sound and space. As discussed in Chapter 2, the group liked create complex systems of speakers and mics that would capture sound at one location and project it in another.

bird.⁷⁷⁹ A more complex spatial soundscape was employed on “A Small Package Of Value Will Come To You, Shortly” from the Streetmasse trilogy on *After Bathing at Baxter's* (1967).⁷⁸⁰ On this track, a multitude of voices, instruments, and other noises randomly occur and form a spatial soundscape. The movement and positioning of these sounds is unrealistic in many respects, and confounds listeners’ natural desires to orient themselves in relation to them.

THREE CASE STUDIES APPLYING THE PSYCHO-AESTHETIC PERSPECTIVE

The following songs were selected as case studies based on three criteria. First, the artists who wrote them explicitly stated that psychedelic drugs influenced or inspired their creation. Second, the songs constitute a meaningful deviation from conventional styles of American popular music. Third, the artists who made these deviations from the aesthetic norms of American popular music had previously demonstrated their proficiency in conventional styles of songwriting. This last criterion is a means of ensuring that the novel features of the songs discussed were intentional deviations by skilled composers, and not the accident of a less-established artist who is struggling to find their personal style. The selected songs are as follows: “Eight Miles High” (1966) by the Byrds, “Tomorrow Never Knows” (1966) by the Beatles, and “Rejoyce” (1967) by Jefferson Airplane. While this dissertation has focused upon psychedelic music from the

⁷⁷⁹ The Holy Modal Rounders, *The Moray Eels Eat the Holy Modal Rounders* (Water Records WATER101, LP, 1968).

⁷⁸⁰ Jefferson Airplane, *After Bathing at Baxter's*.

West Coast of the United States, I have chosen to discuss “Tomorrow Never Knows” given how strongly it satisfies all of the above requirements. Moreover, there is no question that this song and its parent album *Revolver* were very influential upon musicians across the United States.

The following analysis is not a comprehensive theoretical review of the each song. Instead, it seeks to demonstrate the ways in which these songs can be understood through the application of the above psycho-aesthetic framework. I specifically discuss facets of this framework that were relevant to listeners experiencing studio recordings of these songs at home, namely dechronicization, dynamization, hypersuggestibility, heightened auditory acuity, and altered spatial perception.⁷⁸¹ Moreover, given that artists for all three songs have indicated that a specific drug influenced their respective tracks, I focus my analysis on the effects of the substance that was named.

“Eight Miles High”

“Eight Miles High” is a song by the Los Angeles folk rock band the Byrds, which was released as a single in March of 1966. While the song had popular appeal, it contained many unusual features, some of which had no apparent precedent in American popular music. Several members of the Byrds were skilled song writers within the genre of folk rock, having achieved considerable commercial success with their earlier albums

⁷⁸¹ Some of the theories proposed above are only relevant in the context of live performance or relate the experiences of musicians performing music.

Mr. Tambourine Man (1965) and *Turn, Turn, Turn* (1965).⁷⁸² When “Eight Miles High” first aired, it faced criticism for being a song about drugs, and many radio stations stopped playing it. When this happened, the band attempted to convince the public that the song was about their airplane ride to England.⁷⁸³ In the 1980s, however, the band confirmed that the song was actually about both its trip to England and the experience of drugs, with David Crosby remarking “of course it was a drug song! We were stoned when we wrote it.”⁷⁸⁴

Crosby’s remarks suggest that the band wrote the song under the influence of marijuana. Indeed, features of this track can be understood in relation to this drug, particularly its reported ability to increase auditory acuity and alter the experience of time. The song is set in the key of E-minor, uses common time, and has a tempo of 130 beats per minutes. It appeals to the high listener’s heightened auditory acuity by employing prominent instrumental lines that fill both the treble and bass ends of the frequency spectrum with interest. It opens with a thundering bass guitar motive:



Coltrane's song "India," and features a shrill tone color:⁷⁸⁵



Example 2 – “Eight Miles High” Lead Guitar “India” Motive

realization of their artistic intent.⁷⁸⁶

⁷⁸⁶ Unterberger, *Eight Miles High: Folk rock's Flight from Haight-Ashbury to Woodstock*, 2.

⁷⁸⁶ Unterberger, *Eight Miles High: Folk rock's Flight from Haight-Ashbury to Woodstock*, 2.

that could cue the listener to his or her position in the song. On a finer level, the individual instrumental lines are equally as ambiguous. The vocal melodies sung throughout the song are identical, and there is no change in vocal harmony, texture, or intensity as the song progresses. The song contains some variation in its rhythm guitar, bass, and percussion motives, but there is no distinctive pattern or increase in activity that builds to a climax. Perhaps the epitome of the musical dechronicization effect is Roger McGuinn's Coltrane-inspired lead guitar work. These solo passages, more than any other feature, have the opportunity to serve as temporal markers, yet they are as equally ambiguous as the other features. They employ a bop-style of melody and do not contain the structural cues of traditional periodic melodies.



Example 3 – “Eight Miles High” Lead Guitar Solo

Moreover, though highly iterative, McGuinn's solos do not increase in complexity or intensity throughout the song. Put simply, if one cut this song into sections and completely rearranged their order the finished product would seem every bit as coherent and teleological as the original track.

Under the principle of time perception described earlier in this chapter, it is *also* possible that this structural ambiguity would result in the song seeming *shorter* for those who expected the song and its components to last *longer*. At 3' 37", however, “Eight

Miles High” is at least 30 seconds longer than many of the other hits songs of its day, which would increase the likelihood that many individuals heard the song to be longer than its actual duration.

“Rejoyce”

“Rejoyce” is part of the Schizoforest Love Suite on Jefferson Airplane’s album *After Bathing at Baxter’s* (1967).⁷⁸⁷ Released the same year as the band’s immensely popular album *Surrealistic Pillow*, it constitutes the group’s first foray into experimental studio music. The music on the album is a complete break from the folk, rock, and pop hits the band had previously released, and exploits a degree of creative discretion that was arguably afforded by the band’s increased leverage with their record company. The band has long attributed the album’s inspiration to psychedelic drugs, with Paul Kantner describing its contents as “Pure LSD and 13 other things.”⁷⁸⁸ Describing the chaotic happenings that occurred in the studio during the album’s creation, Kantner states:

[Up until then] we kind of inflicted ourselves into the process but we didn’t overtake it. By the third album we were doing acid in the studio, and bringing in motorcycles and nitrous oxide tanks. We got away with stuff just by doing it.⁷⁸⁹

Kantner’s comments indicate the degree to which the album was both inspired by and created on LSD. He also mentions nitrous oxide, which may also have also affected the

⁷⁸⁷ Jefferson Airplane, *After Bathing at Baxter’s*.

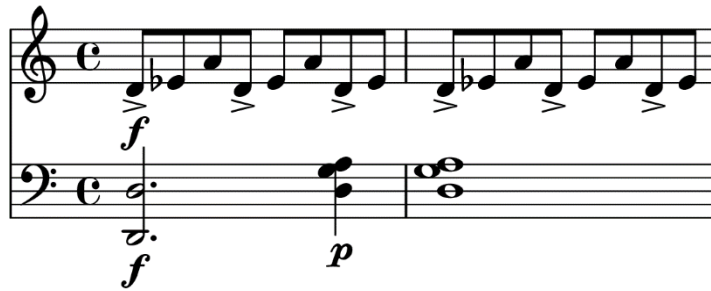
⁷⁸⁸ Sculatti and Seay, *San Francisco Nights: The Psychedelic Music Trip, 1965-1968*, 171.

⁷⁸⁹ Tamarkin, *Got a Revolution: The Turbulent Flight of Jefferson Airplane*, 134.

creative process. Unfortunately, this psychoactive gas is a dissociative psychedelic that functions very differently from the substances analyzed in this dissertation. The following analysis therefore explores facets of the music that can be appreciated to emulate or enhance the effects of LSD.

The album consists of several suites of music that consist of two to three songs each. In the suite entitled “Hymn to an Older Generation” there is a song entitled “Rejoyce.” Like “Eight Miles High,” this song enables both the enhancement and emulation of dilated time on psychedelic drugs by eschewing musical developments that would permit the listener to predict when the song will end. It employs an irregular form (ABCDCB) that is comprised of disparate musical styles. Similarly, the lyrics are abstract in nature and do not unfold along any kind of progressive narrative.

While the entire song is an engaging piece of music, the opening “A” section of the track is the portion that contains the most vivid examples of its relationship to LSD. At the conclusion of the energetic guitar playing that ends the previous song, “The Last Wall of the Castle,” this opening section attempts to put the listener into the altered state through which they are to experience subsequent sections. “Rejoyce” begins in the key of G-minor, employs common time, and moves along at about 110 beats per minute. The song contains several musical features that emulate the dynamization effect. It opens with an arpeggiated tone cluster consisting of “D - E \flat - A,” which obscures the agogic accents of the underlying meter and contains two of the most dissonant intervals in music: the minor second, and tritone:



Example 4 – “Rejoyce” Opening Piano Passage

This tone cluster can be perceived as a dynamized permutation of a D-minor chord, the dominant chord of the underlying key area of this section. Moreover, the driving bass line that dominated “Last Wall” enters as a *rubato* tremolo figure that sounds as though it is melting and dripping off the edge of the track. In the midst of this unstable and somewhat foreboding accompaniment, Grace Slick attempts to draw the listener into a hypnotic state through powerful language capable of exploiting the hypersuggestibility of an individual on LSD:

Chemical change (like a laser beam)
 You’ve shattered the warning
 Amber light
 Make me warm
 Let me see you
 Moving everything over
 Smiling in my room, you know
 You’ll be inside of my mind soon.⁷⁹⁰

Slick’s declamation of these words is incredibly powerful; she forcefully proclaims phrases such as “chemical change” and “amber light” to her listeners, seduces them with her cooing of the word “warm,” and enchants them with an invitation into her mind. The

⁷⁹⁰ Jefferson Airplane, *After Bathing at Baxter’s*.

listener is also struck by her singing “like a laser beam” in the background. Her voice on this statement is heavily modified with frequency filters that lend it a strange timbre and make her sound physically distant. Moreover, the producer emulates or compounds (for the individual on LSD) an altered sense of space by panning Slick’s voice from the right channel to the left on the word “beam,” making it sound as though the voice has shot either across the horizon of the soundscape or—with headphones—right through the listener’s head.

After opening with this psychedelic invocation, the song then proceeds to take the listener through the thoughts and experiences of the narrator’s mind, passing through several key areas, meters, and musical styles in the subsequent sections of the song.

“Tomorrow Never Knows”

“Tomorrow Never Knows” was the last song on the Beatles’ album *Revolver* (1966). When released, it was the most experimental piece of music the Beatles and their producer, George Martin, had created to date. Lennon penned the lyrics after reading *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead* by Leary, Alpert, and Metzner under the influence of LSD. Remarking on his inspiration for the album Lennon stated:

[Timothy] Leary was the one who was going around saying, “Take it, take it, take it,” and we followed his instructions in *The Book of the Dead*, his

how-to-take-a-trip book. I did it just like he said in the book, and then I wrote “Tomorrow Never Knows,” which is almost the first acid song.⁷⁹¹

By the time the band went into the studio to create “Tomorrow Never Knows,” all of the Beatles except Paul McCartney had experimented with LSD.⁷⁹² On the creation of the track, and the inspirational role of the lyrics, Beatles’ assistant Neil Aspinall recalls:

The boys had been storing up all sorts of thoughts for the album and a lot of them came pouring out at that first session! The words were written before the tune and there was no getting away from the fact that the words were very powerful. So all four boys were anxious to build a tune and a backing which would be as strong as the actual lyrics.⁷⁹³

As previously discussed, the lyrics of this song are hypersuggestive in their instructive relationship with the listener. Moreover, for listeners on LSD they contain advice from Leary and his associates on how to enjoy their current state:

Turn off your mind, relax
And float down stream
It is not dying
It is not dying

Lay down all thought
Surrender to the void
It is shining
It is shining.⁷⁹⁴

Lennon also emphasizes and repeats words such as “dying” and “shining” to command the attention of the listener.

⁷⁹¹ Jay Spagler, “John Lennon Interview: St. Regis Hotel, New York City 9/5/1971,” The Beatles Ultimate Experience, <http://www.beatlesinterviews.org/db1971.0905.beatles.html>. Accessed December 17, 2015.

⁷⁹² Jonathan Gould, *Can't Buy Me Love: The Beatles, Britain, and America*, 1st ed. (New York, NY: Harmony Books, 2007), 317.

⁷⁹³ Walter Everett, *The Beatles as Musicians: Revolver through the Anthology* (New York, NY: Oxford University Press, 1999), 35.

⁷⁹⁴ The Beatles, *Revolver*.

The music of “Tomorrow Never Knows” employs various modes in the key of “C,” uses common time, and moves along at approximately 125 beats per minute. The song is perhaps most notable for the many ways in which it emulates dynamization. Lennon’s vocals and Harrison’s guitar solo are particularly brilliant illustrations of this effect. According to George Martin, Lennon wanted to sound “like a Dalai Lama singing on a hilltop” on the vocal track.⁷⁹⁵ To accomplish this feat, Martin applied some frequency filters to Lennon’s voice and ran the track through a rotating Leslie speaker cabinet.⁷⁹⁶ Moreover, the text of this vocal part was notable for being the first instance in which a Beatles song did not follow a strict rhyme scheme.⁷⁹⁷ The result was a vocal track that contained a very surreal embodiment of Lennon’s familiar vocals. The treatment of Harrison’s guitar solo was equally innovative. It began as a simple blues solo that employed a C-minor pentatonic scale, but was subsequently recorded backwards by Martin and passed through a fuzz box and Leslie cabinet.⁷⁹⁸ This created a retrograde melody comprised of a very familiar set of melodic intervals, which did not sound as though it originated from an electric guitar.

⁷⁹⁵ Everett, *The Beatles as Musicians: Revolver through the Anthology*, 36.

⁷⁹⁶ Ibid.

⁷⁹⁷ Bromell, *Tomorrow Never Knows: Rock and Psychedelics in the 1960s*, 94; Everett, *The Beatles as Musicians: Revolver through the Anthology*, 35.

⁷⁹⁸ Everett, *The Beatles as Musicians: Revolver through the Anthology*, 36.



Example 5 – “Tomorrow Never Knows” Lead Guitar Solo

Even Ringo’s drumming, which employed slackened toms and many odd percussive sounds, can be appreciated as a dynamized version of a familiar musical element.⁷⁹⁹

The tape loops on “Tomorrow Never Knows” are another defining feature of the track. The Beatles recorded a variety of sounds and manipulated them by splicing and inverting them to make these loops, which were played at different speeds. Their original content is uncertain. They are supposed to contain McCartney’s laughter as well as various guitar songs, but Beatles scholar Walter Everett who has attempted to reverse engineer the sounds believes that many of them probably came from a Mellotron.⁸⁰⁰ These sounds definitely contribute to the surreal aesthetic of the track, but I believe it is problematic to consider them examples of dynamization. According to Leary’s definition of the word, for something to be dynamized it must first be familiar in some way, and many of the sounds on the tape loops are quite foreign—as evidenced by the fact that there is uncertainty concerning their original content. In many respects, the tape loops can be understood as musical emulations of outright hallucinations, which can also occur on psychedelic drugs.

⁷⁹⁹ Bromell, *Tomorrow Never Knows: Rock and Psychedelics in the 1960s*, 95.

⁸⁰⁰ Everett, *The Beatles as Musicians: Revolver through the Anthology*, 37.

Lastly, the song is an intense spatial experience for the listener, and is capable of both emulating and enhancing this effect of psychedelic drugs. Throughout its entire duration, the listener is immersed in a surrealist soundscape that could never exist in live performance. The tape loops in particular emerge in the mix at varying proximities and orientations to the listener, and are constantly travelling across his or her spatial soundscape. Even the song's less-captivating features, such as McCartney's bass, shift their orientation to the listener for no apparent reason.⁸⁰¹ The entire effect is intensified by Lennon's distant sounding vocals, which encourage the appreciator to listen deeper into the mix to hear him singing from his "hilltop" amid the surreal chaos of the other sounds.

TOWARDS A BROADER APPLICATION OF PSYCHO-AESTHETIC ANALYSIS

There are several challenges one faces in trying to meaningfully apply the above theories of emulation and enhancement to the catalogue of psychedelic works. This is especially true from the standpoint of analyzing the composition and production of psychedelic songs. The individuals who were involved in the creation of psychedelic music were not prone to documenting explanations of their creative choices for posterity. Indeed, the process of music creation and reception that occurred in scenes like San Francisco generally lacked the introspection and verbosity that defined the musical *milieu* of Berlin or Vienna in the nineteenth century. Moreover, even if a musician or producer

⁸⁰¹ Ibid., 36.

wished to discuss the influence of drugs on his or her creations, the act of doing so could bring significant legal and commercial risks. For much of the Sixties, record companies sought to suppress any publicity that associated their products with drugs, since even suspicions of such a relationship could result in radio stations banning their content.⁸⁰² Moreover, I believe the histories of bands like the Grateful Dead and 13th Floor Elevators evidence the reliability with which artists who were associated with drugs became targets for law enforcement. Even if most Sixties artists were willing and able to discuss the influence of psychedelic drugs on their creative process, I imagine few would describe an intentional implementation of the theories outlined in the first part of this chapter. Most psychedelic artists were young men in their twenties who did not complete college. While many were intelligent people, I believe they acted first and foremost on creative impulses inspired by what sounded good to their ears. In congruence with the classic “theory follows practice” paradigm, the aforementioned theories of emulation and enhancement are an attempt to explain *why* the aesthetic features they chose sounded good to both artists and listeners alike.

In the future, it may be possible to explore these psycho-aesthetic observations in a more scientific manner. The perception of specific songs or musical devices could be evaluated in music cognition labs using participants under the influence of psychedelic drugs, yielding more definitive answers to the questions this dissertation has sought to address. In the meantime, I believe the theories I assert in this chapter offer a plausible

⁸⁰² Unterberger, *Eight Miles High: Folk rock's Flight from Haight-Ashbury to Woodstock*, 3.

and interesting perspective on the creation of this music, how it has been appreciated in the past, and how it could be appreciated today.

CONCLUSION

EPILOGUE

By the end of 1966, the mainstream media's coverage of LSD began to raise concerns about the drug among the American public. On October 6, 1966, it became illegal to possess LSD in California.⁸⁰³ The drug was banned by many other state legislatures, until the U.S. Congress passed the Staggers-Dodd Bill of 1968, which made it a federal offense to possess the substance.⁸⁰⁴ While psychedelic drugs themselves were pushed underground, there was little mainstream America could do to stop the flow of psychedelic *culture* from its bastions in California. In the context of the larger culture war, psychedelic music was a powerful means of soliciting interest in the alternative values and lifestyles that were being lived on the West Coast. The commercial success of this music helped it spread. While most mainstream psychedelic hits contained no explicit mention of drugs in order to avoid censorship, they nevertheless drew attention to the counterculture that used them.

Most of the bands discussed in this dissertation had disbanded by the early 1970s, and many of the artists that comprised them moved on to new styles of music. The most notable exception to this statement is the Grateful Dead, who continued to tour and keep both the Deadhead culture and their distinctive music alive until 1995. In the 1970s, many of the musical traits and values that defined Sixties psychedelic music were continued in progressive rock. This genre, which largely began the United Kingdom,

⁸⁰³ Stevens, *Storming Heaven: LSD and the American Dream*, 320.

⁸⁰⁴ *Public Law 90-639*, H.R. 14096.

sought to push boundaries by incorporating new composition structures, complex harmonic and rhythmic devices, and extreme virtuosity into the rock medium.⁸⁰⁵ Pink Floyd in particular popularized a new idiom of music with important albums like *Dark Side of the Moon* (1973) and *The Wall* (1979), which many listeners considered to be the next psychedelic tradition.⁸⁰⁶

UNDERSTANDING PSYCHEDELIC MUSIC

The musical sounds that comprised psychedelic music in the Sixties came from a variety of sources. From folk rock, psychedelic artists adopted the practice of playing arpeggiated chords on electric guitars in their rhythm sections, borrowing the characteristic “jingle jangle” sound pioneered by Roger McGuinn of the Byrds. The close vocal harmonies of folk music were also borrowed on many tracks, as was the genre’s practice of authoring songs with introspective lyrics. Surf rock had a less direct influence upon psychedelic music, but many of the musical features of psychedelic songs were first introduced in the genre. Musicians such as Dick Dale helped pioneer a new generation of guitars and amplifiers that would be inherited by psychedelic artists. Moreover, surf rock established a new idiom of lead guitar playing, which was more aggressive and less bluesy than its predecessors. Surf rock hits, such as “Miserlou,” were also among the first rock songs to convey a sense of the exotic using atypical forms,

⁸⁰⁵ Paul Hegarty and Martin Halliwell, *Beyond and Before: Progressive Rock since the 1960s* (New York, NY: Continuum).

⁸⁰⁶ DeRogatis, *Turn on Your Mind: Four Decades of Great Psychedelic Rock*, 138.

minor keys, and Eastern-sounding melodies. The genre also anticipated psychedelic music in its objective of trying to convey a sensation--the feeling of surfing—to the listener, much like the latter sought to convey the experience of drugs. Jazz music also played an important role in the creation of psychedelic music, though its influence was largely inspirational. Few psychedelic musicians had any meaningful jazz skills, or the theoretical knowledge to understand how music from that genre was structured, yet many of them were inspired by the freedom of jazz music, and sought to incorporate improvisation and flexible song structures into their music.

Music technology and the advances it made during the Sixties had a considerable impact on psychedelic music. Artists could manipulate sound with greater ease and control through compact transistor-based devices such as stomp boxes, as well as studio-based technologies such as frequency filters, ring modulators, and tape delay devices (for reverb and echo). Musicians and producers also embraced technology to produce surreal sounds that had little to no precedent among acoustic and electric instruments. Some employed devices like the Moog and Buchla voltage-controlled synthesizers to achieve new sounds, while artists like Brian Wilson created them by fusing the timbre of different instruments through multi-tracking. Moreover, they used new multi-tracking devices to create elaborate multi-layered textures, and mastered them with considerable clarity on stereo records. The result was highly experimental albums that redefined the boundaries of popular music.

In San Francisco, many of the individuals who pioneered early psychedelic music were not seasoned musicians. Several important bands started as loose gatherings of

friends who would play casual jam sessions with their instruments for fun. Many of these groups were willing to perform on stage despite their deficits in skill, and were often warmly received by audiences who embraced their music. This scene served as an incubator for new musical sounds to germinate and spread in a manner that would not be possible had a certain level of professionalism—and the standardization that accompanies it—been expected.

The culture that persevered at Bay Area events was also quite special, and stemmed from two progenitors. The first was a community that formed around the Charlatans at the Red Dog Saloon in the summer of 1965. At this venue, individuals enjoyed psychedelic drugs and music together in the freedom afforded by the Saloon's location in rural Nevada. In the fall of 1965, the Family Dog commune brought the culture and music of the Red Dog Saloon to San Francisco in a series of dance concerts, which eventually inspired Bill Graham and Chet Helms to open their respective venues: the Fillmore Auditorium and Avalon Ballroom. The second, was the series of Acid Tests held by Ken Kesey and his Merry Pranksters beginning in November of 1965. These events were produced for the purpose of introducing individuals to LSD in a stimulating environment, which also included music. Whenever possible, the band that provided this music was the Grateful Dead, and it was at these events that the influential Deadhead culture formed.

By the summer of 1967, the San Francisco scene had begun to receive national attention, and major record labels were eagerly signing record deals with psychedelic

artists. The commercial success of the genre caused the once taboo term “psychedelic” to become a marketing ploy, as the mainstream’s moral objections to drug culture were overridden by the entertainment industry’s desire for profit. As a result of this popular attention, a wide variety of disparate musics all came to bear the descriptor “psychedelic.”

As outlined at the beginning of chapter two, the music that came to be described with this term generally met one of three non-mutually exclusive criteria: (1) it had a “surreal” aesthetic, (2) the artist(s) who created it sought to enhance, emulate, or verbally express aspects of the effects of psychedelic drugs, (3) it emanated from a subculture in which psychedelic drugs figured prominently.

Most of music from the Sixties that is called “psychedelic” today belongs to the first category, if only because the vast majority of musicians in the decade did not explicitly describe what role—if any—drugs played in their music. Many of the songs and albums that belong exclusively to this category were created by artists who are known to have enjoyed drugs, and possess aesthetic features that would have sounded surreal to most listeners. It is possible that the presence of these musical qualities could have been the result of other factors, such as a desire to imitate other artists or engage with the many new advances in sound equipment and studio technology, instead of experiences inspired by drugs. For this reason, music belonging to this category is considered psychedelic for the way in which it was received, and not for the impetus or manner of its creation.

Music in the second category may contain some of the surreal qualities of the first, but differs in that there is reason to believe that the artist sought to connect his or her music to the experience of psychedelic drugs. In some instances, this relationship may be as simple as a description of a drug-induced experience in the lyrics of a song. In others, this relationship may exist through musical sounds and structures that seek to emulate or enhance the effects of drugs in a more complex manner. In some instances, artists sought to *emulate* these substances by incorporating sounds and musical structures that either were emblematic of the sensory effects of psychedelic drugs or created perceptual distortions that imitated their psychological effects. In others, they sought to *enhance* the experience of psychedelic drugs through sounds and musical structures that played upon the altered sensibilities of listeners who were under their influence.

Music belonging to the third category is considered psychedelic because it is the *product* of a drug subculture. The foremost representative of this category of music is the Grateful Dead. Though they are considered to be one of the greatest psychedelic bands of their era, many of the Dead's songs do not sound surreal. Moreover, the emulation and enhancement of drugs was not a stated goal of the band, and few of their lyrics had anything to do with drugs. Nevertheless, the music's role as a gathering point for the Deadhead culture has caused it to be psychedelic by association. Moreover, the synchronicity with which the band sometimes played seemed to resemble the kind of intersubjectivity psychedelic drugs fostered among their tight-knit audience.

TOWARDS A BETTER UNDERSTANDING OF THE RELATIONSHIPS BETWEEN DRUGS AND MUSIC

There is currently a considerable divide between the subjective effects cited on self-report studies concerning psychedelic drugs, and the existing body of objective scientific evidence. Moreover, attempts to measure the effects of these substances upon function and performance have often yielded results that contradict the experience of their users. Indeed, little is understood about the way many of these drugs cause their purported effects.

The effects of LSD on the experience of music are highly subjective and difficult to summarize. There are, however, a small number of experiences that seemed to be shared by many users, among them: forms of synesthesia, the experience of *becoming* a sound or an object producing it, temporal prolongation of musical time, novel understandings of meaning and organization, heightened affectivity, and hypersuggestibility. Self-report studies indicate that the effects of marijuana on the experience of music are far more predictable. While vivid experiences such as synesthesia can occur with this drug, the most commonly reported effects seem to be a dilated perception of musical time and heightened auditory acuity. The latter effect constitutes the most perplexing divide between the self-report data and that from objective studies concerning these topics. While a high number of users believe their hearing improves under the influence of marijuana, researchers have been unable to conclusively prove any increase in this ability or explain why this common perception exists. Data from self-report studies, including the one performed for this dissertation, as

well as the results from a lab study performed by Thaler *et al.* in 1973, suggest that the aspect of auditory acuity that *may* be particularly enhanced is the ability to discern individual sounds from one another. In this way, further research needs to be done into the drug's impact on this specific aspect of hearing.

Several attempts have been made to explore the effects of psychedelic drugs on creativity, but such efforts are complicated by the fact that creative ability is very difficult to both define and measure. Among the more popular means of assessing creativity are divergent thinking tests, which measure an individual's ability to create multiple solutions to a problem or task. These tests, however, have largely failed to capture the increases in creativity reported by users. With regard to LSD, research by Oscar Janiger and others suggest that this substance is capable of changing the creative process for certain individuals in ways that may not be accurately assessed on divergent thinking tests.

As previously stated, there is much that has yet to be understood about *how* psychedelic drugs produce their subjective experiences. This is especially true for LSD and similar substances. While scientists can identify the serotonin receptors in the brain upon which LSD acts, the precise result of this interaction remains largely unknown. In recent decades, scientists and policymakers have shown an increased resolve to understand the human brain. A recent sign of these efforts is the Brain Research through Advanced Innovative Neurotechnologies (BRAIN) initiative announced by the Obama Administration in 2013, which has devoted 300 million dollars a year over ten years in hopes of mapping every neuron in the human brain. These investments, coupled with

more sensible policies on research involving psychedelic drugs, will hopefully yield new insights into these substances and the ways they affect the experience of music.

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