

FRANK ZAPPA'S MUSICAL LANGUAGE

5TH EDITION, SPRING 2020

Three-volumes version: VOLUME I

A study of the music of Frank Zappa

by Kasper Sloots

Website print of:
www.zappa-analysis.com
Obtainable through this site

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Utrecht, Holland

FOREWORD

This pdf file is the fifth edition of my private research into the music of Frank Zappa, that I probably will keep updating on-line over the coming years. The first printed version was finished in April 2000, simultaneously with an internet release as www.zappa-analysis.com. I've been extending this site over a period of twenty years. A second version came out in September 2001, a third in 2007 and a fourth in 2012. Compared to the first one this 5th edition has about ten times increased in size. The number of sections as well the number of note examples has been extended. The conclusion has basically remained the same. Apart from corrections upon detail errors, this site is only augmenting, not significantly changing. See the on-line What's new section from the left menu for recent additions.

Originally this study started with several sketch transcriptions of fragments that sounded interesting to me and for which I tried to find out what technical elements could be found in them. Maybe there was something typical Zappa in them. But what I found was more an amazing variety of deviations from standard patterns going into all directions, than something that could be called Zappa-esque. While the number of sketch transcriptions increased I thought of writing an article about them and trying to get the transcriptions correct. The latter proved to be much more of a problem than the writing of the text. Though most of Zappa's orchestral scores and chamber music scores are available, at the time I started writing only one songbook and a guitar book were published. This situation has improved significantly with the Hal Leonard series of album transcriptions by Andy Aledort, Paul Pappas and Addi Booth. Very helpful has also been the turning up of samples from original scores, appearing from all sorts of angles. So partially I could rely on transcriptions made by others and original scores, but for about two-third I had to do it myself. At first I underestimated the effort it would take to produce transcriptions. In some cases the unpredictability of Zappa's music makes it hard to be positive that the transcriptions and analysis are correct. The risk that there's some stupid looking error in it somewhere remains present. I also must apologize for my unsophisticated English; English is not my native language.

INTRODUCTION

Music in the second half of the 20th century has stylistically become more and more fragmented into categories, with rock music, jazz and modern music as the main areas, having their own groups of listeners and critics. Furthermore these main sections have a lot of subdivisions. Apart from this stands the classical music from the past, which also tends to attract a separate group of listeners. Zappa never treated pop music, jazz and modern music as separate fields and his importance depends partly on his skillful combination of these three musical directions. In the year of his death (1993) he had a legacy of over fifty highly diverse CDs. The recordings comprehend the easiest love songs on "Cruising with Ruben and The Jets", many complex rock based albums, jazz albums like "The Grand Wazoo", guitar solo albums, atonal music for classical ensembles and a few verbally oriented releases as "Thing-Fish".

Though Frank Zappa is basically known as a rock musician, in the last ten years of his life his reputation as a composer of modern music started to increase. In 1982 and 1987 orchestral pieces performed by the London Symphony Orchestra were released on record; in 1984 this release was followed by chamber music with the Ensemble Intercontemporain, conducted by Pierre Boulez, and in 1993 by the The Yellow Shark project, featuring the Ensemble Modern. Sections of modern music can also be found in several of Zappa's so called rock albums, sometimes performed by hired musicians (for instance the "200 Motels" album of 1971 featuring The Royal Philharmonic Orchestra), sometimes performed by his own rock band (for instance "The Black Page" on "Zappa in New York", 1976).

Because of the diversity of his albums it becomes difficult to give Zappa a suitable place in music history and also to write about his music with a clear chapter division treating individual aspects. Examples of one aspect may very well be examples of another aspect at the same time. For this site I have chosen to follow Zappa's career historically and to comment upon several technical aspects along the way. The following order of the subjects may be arbitrary, but I think it becomes better readable this way than by summing up

technical elements. The historical facts are treated only briefly, because a lot of material has already been published on this subject. As it comes to musical analysis a study in German language by Wolfgang Ludwig should be mentioned, that has appeared in 1992. Of this study a summary is included. Zappa himself doesn't make it easy for us to get a good picture of his musical intentions in his interviews. Because his albums only occasionally became hits, Zappa sought some compensation for this in a good sense for publicity with a never-ending series of humoristically-provoking remarks. He repeatedly contradicted himself and it would be a mistake to take everything he has said too seriously. The estimation of Zappa's CDs has still to begin. It is often heard that his output differs a lot in quality, so this might appear to be true. But when some critic is commenting upon the "good and bad" CDs, it's each time about different CDs, so it says more about personal preferences than about a starting consensus. Personally I think they differ in function.

NOTE:

In the first place this is a literal copy of the content of www.zappa-analysis.com, distributed for free. The lay-out of the note examples hasn't been adapted for a pdf version, so there are frequent size differences between score images and occasional blank spaces between pages. The following order of texts and note examples, however, has repeatedly been lightly adjusted for improving the lay-out. Because of that it may be that the text says "above" instead of "below" as it comes to a note example, or the other way around. The words "above" and "below" occur too often to verify all instances. The text can refer to midi files and images that are available on-line only.

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Frank Zappa (1940-1993) is an American composer, whose work is characterized by a high degree of diversity and creativity. His output of over 60 CDs covers about all styles of the 20th century as rock, doo-wop and jazz as well as modern works for ensembles and orchestras. He also worked as a filmmaker and has a reputation as a critic of American society. After his early death due to prostate cancer, his legacy is governed by a family trust.

Zappa was born in Baltimore on December 21, 1940. He became the eldest of four siblings. His father worked as an engineer with varying jobs, which caused the family to have to move frequently. His interest in music first showed itself during his teens, when he became a drummer in local bands. At the age of eighteen he learned to play guitar. At the same time that he was listening to blues, he taught himself to write sheet music and got fascinated by the music of Edgar Varèse. After graduation Zappa took one semester of formal musical education at Chaffee Junior College, where he met his first wife Kay Sherman. When he had reached twenty, Zappa had enough musical understanding to write orchestra music, next to being able to play the standard pop and jazz repertoire. Playing in bands became his job. The first opportunity to have his sheet music performed came when he got commissioned by Timothy Carey to do the soundtrack for *The world's greatest sinner*. With the orchestra music recorded in 1961, this film premiered in 1963. In the same year Zappa could record chamber music for another movie, called *Run home, slow*.

THE LOST EPISODES: ZAPPA'S TEENS

Zappa's interest in more than one musical direction already showed itself in his teens. On one side he had the ordinary interest among teenagers in the popular music of the fifties, like rhythm and blues and close harmony vocal songs, called doo-wop. He played in some high school bands, the first one named the Blackouts. A photograph of this band has for instance been published in "The real Frank Zappa book" and the one below, where we can see him sitting behind the drums, his first instrument. At the age of eighteen, he started to learn how to play guitar, the instrument that would bring him reputation in the future.

Lost in a whirlpool

An example of Zappa playing guitar at this time has actually been kept. It's a blues improvisation with him playing lead guitar in E Dorian, his brother Bobby on rhythm guitar and their friend Don van Vliet singing the lyrics instantly about being lost in a whirlpool.

Zappa: "While all other guys spent all their money on cars, I bought records (I didn't have a car). I went to second hand stores to buy jukebox records with rhythm and blues songs [...]. Don was also an R&B maniac, so I took my singles to his house and we listened for hours to obscure hits by Howlin' Wolf, Muddy Waters, Sonny Boy Williamson, Guitar Slim, Johnny "Guitar" Watson, [...]" (Real FZ book). It was recorded in an empty classroom on a Webcor reel-tot-reel that happened to be standing there and the song is included on "The lost episodes".

The image shows a musical score for a guitar piece. It consists of two staves, both labeled 'Guitar'. The key signature is one sharp (F#) and the time signature is 4/4. The top staff contains a melodic line with various rhythmic patterns, including eighth and sixteenth notes, and rests. It features several multi-measure rests: a 6-measure rest at the beginning, a 3-measure rest, and a 9-measure rest. The bottom staff contains a harmonic accompaniment with chords and single notes, also featuring multi-measure rests of 3, 3, 6, and 3 measures. The notation includes various musical symbols such as slurs, accents, and dynamic markings.



Lost in a whirlpool, opening. Transcription: Kasper Sloots (KS). Update 2005, renewed in 2020.

It may be self-evident from the title of this study that the author of the music itself represented in the note examples in this study is Frank Zappa, of which the copyright since his death has gone over to the Zappa Family Trust.

Zappa had no natural gift for instrumental virtuosity and his capacities as a guitar player grew through the passing of the years. Jimmy Carl Black, his drummer in the sixties, commented that in 1964 Zappa was not a great guitar player at that time. When he was able to play the guitar he left the drumset, but there are a few recordings from the early sixties with Zappa playing the drums (for instance "Anyway the wind blows" on "The Lost Episodes"; see the Cucamonga years section) and occasionally he would play percussion instruments on his later albums. At the same time he became wildly enthusiastic about the music of Edgar Varèse, one of the atonal modern composers, who called his compositions organized sound, having absolutely nothing in common with the pop music of the fifties. He was able to get a copy of volume 1 of the three record set with Varèse's complete orchestral works conducted by Robert Craft. The influence of Varèse on Zappa was not so much that Zappa became a follower of Varèse, but that it stimulated his ambitions to become a composer of modern music.

In the left menu of this site you can find a discussion taking place between me and an American scientist, Brett Clement. It's very interesting material with its main benefit being that it enticed me to look at a large number of compositions anew and deepen the analysis of them. About blues Brett writes: "Blues aspects in Zappa range from full-on 12-bar blues based music (ex. Road Ladies) to blues-styled solos over static one-chord vamps (ex. The Gumbo Variations). Almost without fail, Sloots analyzes these situations as Dorian or Mixolydian. In certain cases, he is simply wrong (ex. Lost in a Whirlpool/Been to Kansas; basically, there is no way that the 12-bar blues can be labeled as strictly Dorian). In others, there is a possibility that the term "Dorian" could be used to describe the music, but with an important qualification: [etc.]"

See the Imaginary diseases section of this study at "Been to Kansas City in A minor" for the full citation and a lot of comment. In this case Brett has a point. In the example above Frank is soloing following solely E Dorian, while Bobby is using a chord scheme that can't be attributed to one particular scale:

- bars 1-4: E9
- bars 5-6: A7
- bars 7-8: E9
- bar 9: B7
- bar 10: A#dim-B7

- bar 11: E9-B7
- bar 12: E9-A#dim-B7 (Frank and Bobby)

There's no adequate musical term covering a situation as this. Polyscalar doesn't describe it properly, chromatic or atonal aren't an option. Let's say it has a basis in E Dorian with accompanying chords from varying scales. My guess would be that Brett prefers to call the melody minor pentatonic with the C# from bar 4 being incidental.

Pound for a brown - The legend of the golden arches

If you take his word for it, all his early compositions were modern music for small ensembles. One of them is "Pound for a brown". On the album liner notes of "The yellow shark" he's saying: "The tune dates from 1957 or '58. It was originally a string quartet I wrote right about the time I graduated (from high school). It's one of the oldest pieces, and it's been played by just about every one of the touring bands, in one version or the other". Its tune became one of Zappa's favorites. It made its first appearance on the "Uncle meat" album of 1968 in two versions. The first version carries a different title, namely "The legend of the golden arches". The main theme is given here below. This theme has several characteristics that return more often in Zappa's music:

- The theme is purely melodic. The instruments are moving freely through the keys. Harmonically it's a free blending of the notes. The harmonies formed at a specific point can be both traditional and untraditional chords. The whole can hardly be seen as a form of a chord progression in traditional terms.
- Two instruments can be playing in parallels, fourths and thirds in this case. Others are giving complementary movements. It's built up in layers, the staves in the transcription are combinations of instruments and at some points it's difficult to exactly hear the individual notes.
- The melody itself has no tonal centre, but is played over a basso ostinato figure. The figure starts with B as pedal note, so the key becomes B Mixolydian in the first 7 bars, determined by this pedal note of the accompaniment. It has various chromatic elements in it. For bars 8-9 the ostinato figure briefly changes. The figure itself uses both an A and an A#, but the other instruments are using solely an A#, so these two bars are more in B major. In the third printed edition of this study these two bars had C# as a pedal note, but I misheard that; the transcription had to be renewed with the Martin Herraiz study as a reason for it (page 246, see the literature references). In bar 10 we're back at B Mixolydian. The chords formed by the basso ostinato figure are untraditional. The underlying chord in the bass in bars 1-7 is in rock terms referred to as Esus4, in classical harmony it's part of for instance the VII 9th chord of B Mixolydian with two of the notes from this chord skipped.

The legend of the golden arches, theme. Transcription: Kasper Sloots (2001/2012)/Martin Herraiz (2010).

Lydian system: Eb
Pedal: F Mixolydian

Example 4.19. "Pound for a Brown" (*Uncle Meat* 0:05–0:12).

Previous page: Pound for a brown, example from the B. Clement study. See the left menu of this site or his original study for what he means by a Lydian system.



Bars from the Legend of the golden arches example from the M. Herraiz study.



The legend of the golden arches, staff 1 from bars 12-16 from the arrangement by Robert Peate. Bars 7-11 are notated in 3/4 plus 4/4, like Martin and Brett are doing, though without a separate 7/8 for the accompanying figure.

"Pound for a brown" was used during many tours, including additional opportunities for the band members to improvise. There are versions on "Ahead of their time" and "You can't do that on stage anymore IV" and "V". It got its final and most elaborate version as a chamber orchestra piece on "The yellow shark". During the sixties the Mothers of Invention still used to refer to this piece as the string quartet, with "Sleeping in a jar" as its second movement (it's played that way on "Ahead of their time"). Apparently Zappa only started titling these two pieces for the "Uncle meat" album. In this album's version of "Pound for a brown" the string quartet set-up is still readily detectable: the two violins must have played staff 1, the viola staff 2 and the cello staff 3.

Rhythms and meters to a degree allow notational variants. In the study by B. Clement you can see that he chose for notating the melody as 3/4 plus 4/4, being played over two periods of the ostinato figure. This solves the hemiola from bar 2 to 3 in staff 1 in my example. In this study I'm inclined to always let downbeats determine the meter, but there are situations where one might choose for a different approach:

- Village of the sun: my 3/8 plus 5/8 bar can also be notated as two times 4/8, so that the meter remains constant.
- Wind up working in a gas station: my 17/16 plus 15/16 bars can also be notated as two times 4/4, the standard meter for rock songs.

Without a change of meter you would get heavy hemiolas on both occasions, including the downbeat. The

above Clement notation solves one hemiola in the melody, but creates a new one from bar 4 to 5 when listening to all parts. This concerns the E-B at the beginning of bar 5. As quarter notes they would go over the bar line in the Clement notation. In the Herraiz example on page 246 of his study this is getting notated as if this isn't happening. The E and B get cut off to an eighth note. There are many examples in Zappa's music using two meters simultaneously. The ones from my study are listed in the Roxy and elsewhere section. In the arrangement by Robert Peate from 2010 yet again different meter notations are chosen. For the second half of the main theme, he's using 4/4 and 2/4. Let's say it's undecided how it should best be notated.

Sleeping in a jar

One can't immediately recognize a string quartet set-up in case of "Sleeping in a jar". One could create a string quartet arrangement, but there are no clues in the later executions how the original string quartet version might have sounded. On the "Uncle meat" album "Sleeping in a jar" is played as single melody, made up of two phrases, played only once, as if Zappa only wanted to touch upon this theme. It ends with a peculiar coda with a sequence of fast high notes. On "Ahead of their time" it's given a more normal structure, combining it with other themes and letting the main theme return.

Uncle Meat:

- 0:00 Central theme, phrase A ("It's the middle..."), played twice.
- 0:21 Central theme, phrase B ("Sleeping, mum and dad...").
- 0:31 Outro
- 0:49 End

Ahead of their time:

- 0:00 Intro
- 0:23 Central theme, phrase A (instrumentally), played twice.
- 0:39 Central theme, phrase B (idem), played half as slow.
- 0:56 Intermezzo with two smaller side themes and vocal improvisations.
- 1:37 Central theme, phrase A (instrumentally), played twice.
- 1:52 Central theme, phrase B (idem), played half as slow.
- 2:08 Outro
- 2:24 End

Handwritten musical score for "Sleeping in a jar, theme". The score is in 4/4 time and B-flat major. It features vocal lines with lyrics "It's the--" and "Night--", piano accompaniment with triplets and chords, and a section marked "Bars 1-4 Repeat alike". The score includes dynamic markings like *mf* and *mp*, and performance instructions such as "Sva->" and "(Plus G continuing)".

Sleeping in a jar, theme. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

Above the opening bars and final bars of the "Waltz for guitar" in Zappa's own handwriting from 1958. It's a composition of one page with 22 bars. Here it carries the title "Waltz #1", implying the existence of at least another waltz from this period. In Zappa! it's notated for guitar, thus an octave higher as it sounds. There are a couple of examples in this study of his scores in his original handwriting. When you lay them next to each other it becomes easy to recognize them. This is his handwriting at the age of 18, very neat at that time. His "mature" handwriting became more fluid, but remained clearly legible. Aspects that are typical of him is to put the meter with numbers in a larger font-size in front for a couple of staves at once (instead of for each staff separately), as well as shortening bows. He's not doing the second here yet. He also had a preference for writing texts with capitals only. The comparison of his handwriting over decades indicates that the "© 1958 by Frank Zappa" and "spezial copy for Nedra" words were added later on, during the seventies or later. As also the deliberate misspelling of "special" does. In the final three bars you can see the 12-tone string turn up for the last time: G-F#-A#-A-E-Ab(G#)-D-Eb(D#)-B-F-Db(C#)-C.

Mice - The Blackouts

This last paragraph of this section is about two relics, that aren't that much musically relevant, but historically. In a couple of interviews Zappa has called "Mice" the first, maybe second, composition he wrote. He did this at the age of fourteen, when it was a requirement to play a mini-solo on drums to be in the drum section of the high school band. Details can be found at <http://globalia.net/donlope/fz/songs/Mice.html>. On this page you can find an mp3 outtake from the NBC Midnight Special interview from 1976, where you can hear him commenting upon this composition and singing how the beats went from recollection. In the example below I've notated both the beats in drumset notation and the way Zappa is simulating it as "ra-ta-ta-tan" etc. It sounds credible and it's teasing to know he kept some of these very old scores in his archive. There may be more than the pieces from above.

Ra-ta-ta tan-, ta- tan-, ta-tan-, duh- ran-, ta-tan-.

Mice, sample.

mf And e-vry body's (groo-vin'-) Lou-is Arm- strong and his boys are gotta be- there,
(no meter)

mp Ti-tans,

And the Ti-tans, and the-, and the Vel-vets and the Black-outs.

Vel-ve-tones-

The Blackouts, fragment.

Transcription (both examples): KS (update winter 2018, deposited at the I-depot, The Hague).

Thanks to this interview you're able to hear "Mice" as a snare drum solo in the shape of a sample of three bars. It's a few figures in 6/8, functional for passing the little exam. "The Blackouts" from "The lost episodes" isn't a composition, but a conversation taped by Zappa. You have two members from The Blackouts talking about their appearance at the NCAAP benefit concert at the Shrine Auditorium in Los Angeles. They were awe-stricken by the size of the event they took part of, featuring among others Louis Armstrong. To the right a group photo with Zappa standing third from left. Spontaneous and directed dialogues could sometimes get incorporated in Zappa's albums, as separate tracks or as a part of songs. There are also various examples of compositions with spoken texts involved. Texts have pitches and rhythms, but no meters. Zappa never went as far as prescribing such details. He just put the words in an otherwise empty bar or beneath the musically notated notes. This study contains midi files too (on-line version), so for constructing them spoken parts are transcribed as how they appear on CD. The interaction between music and language can be encountered in three ways in Zappa's output:

- The incorporation of plain spoken text within musical compositions. See for instance the "Dental hygiene dilemma" and "Heavenly bank account" examples from this study.
- The speech-wise singing or reciting of texts, as in "Montana" or "Do you like my new car?/The groupie routine". See also the Man from Utopia section from this study.
- The rhythm of musical notes being speech-influenced. See for instance "Drowning witch" (first example) and "Wild love".

Other tracks from The lost episodes

Next to "The Blackouts" and "Lost in a whirlpool", "The lost episodes" contains a series of pieces from the sixties and seventies, that so far hadn't been released. Several are coming by in this study:

- "Take your clothes off while you dance": the version from 1961 is included in the Paul Buff section.
- "Tiger roach": a blues improvisation with Don Van Vliet, also included in the Paul Buff section.
- "Run home, slow": a couple of examples from this movie are included in the Movie scores section, including the theme and cue #3.
- "Any way the wind blows": the version from 1963 is included in the Paul Buff section.
- "Kung Fu": this version is included in the Burnt weeny sandwich section.
- "RDNZL": this song gets dealt with in the Studio tan section.
- "Sharleena": the 1970 version of this track is coming by in the Chunga's revenge section.

THE MYSTERY DISC #1: MOVIE SCORES

The first opportunity for having his music performed presented itself in the shape of movie scores. In 1959 he reached an agreement with Don Cerveris, his English teacher on high school. Cerveris had written a script for a cowboy movie and Zappa would write the scores for the soundtrack. Because the film couldn't get sufficiently financed, this idea got postponed.

The world's greatest sinner

In 1961 a second chance came up for writing the score for a low budget movie called "The world's greatest sinner", a Timothy Carey project. In December 1961 the recordings of the orchestral parts took place with the Pomona Symphony Orchestra. No tracks from these recordings have appeared on CD, but the title track - a rock band blues song - was released as a single in 1963 (it's unclear in what form it was used for the movie, the video version apparently doesn't include it). It's blues in A Mixolydian with in the transcription below the standard blues chord scheme included once:

- bars 1-8: intro. Bars 1-4 are playing around the A#m-5 chord, bars 5-8 switch to A Mixolydian.
- bars 9-12: I.
- bars 13-14: IV. The C becomes natural, switching to the A Dorian scale.
- bars 15-16: I.
- bar 17: V (only implied).
- bar 18: IV.
- bar 19: I (return to I in A Mixolydian, after two bars of I the scheme restarts.)

Zappa kept playing blues every once in a while throughout his career. See the Bongo fury section halfway this study for more on this topic. "The world's greatest sinner" was presented in 1962, but only reached some cult status (see www.imdb.com/title/tt0056703 and www.absolutefilms.net/videosale.html for information about this movie). It's available on video and hopefully coming up on DVD shortly, because both the soundtrack and the movie deserve closer attention. Zappa was twenty when he wrote the score in the summer of 1961 and it shows that he indeed started out as a composer of modern music. It's functional music for a movie and professionally done, indicating how much Zappa had learned via classes and self-education. He gets often quoted for saying that he shortly went to the Chaffey Junior College for meeting girls, his only formal semester of education after high school. That's only half of the truth. He did indeed meet his first wife Kay Sherman there, but he was also known as an ardent student. He quit school when he found that he had learned enough. Presented below are three sections from the soundtrack. The first is a little piece of parade music in a modern style, where he's toying with intervals:

- bars 1-2: the first theme by the woodwinds is played with parallel minor seconds.
- bars 3-6: the second one by the brass is played consonant intervals between the lines (fourths and thirds in staves 3-4), combined with a bass D as pedal note by the timpani and a B in the descant (staff 5).

Whereas bars 1-2 are atonal, this section can be seen as in D (theoretically it can also be identified as D Lydian, because the G/G#, that makes the difference, fails).

- bars 7-8: a variation upon the first theme.
- bars 9-10: a theme played via syncopic triplets and varying intervals. Again bars 7-8 are atonal and bars 9-10 in D for its bass D by the timpani.

The image shows a handwritten musical score for the piece "The world's greatest sinner". The score is written in 4/4 time and consists of several systems of staves. The instruments involved are Bass (two staves), Guitar (one staff), and Double Bass (two staves).

- System 1:**
 - Bass (top): Includes a trill-like figure with the annotation "Aw, he's the".
 - Bass (middle): Includes the annotation "Say barba...".
 - Guitar: Features a melodic line with dynamics *p* and *mf*, and the instruction "Three times".
 - Bass (bottom): Includes the annotation "Three times".
 - Double Bass (bottom): Includes the annotation "Accompanying figures repeat".
- System 2:**
 - Bass (top): Includes the annotation "world's...".
 - Bass (middle): Includes the annotation "Acc. figures go up a fourth with C natural".
 - Bass (bottom): Includes the annotation "Acc. figures as bar 8 again".
- System 3:**
 - Guitar: Includes the annotation "Acc. figures pause".
 - Bass (bottom): Includes the annotation "Acc. figures as bar 8".

The world's greatest sinner, 0:00 till 0:35. Transcription: KS (3rd printed edition 2007).

There are some five minutes of various forms of such modern music with percussion parts, dissonants and rhythmic variation to be found in the score. The second example is played very slowly during a funeral scene in the movie. In bars 6-7 it includes a motif that returns at the beginning of the third example. This last one stems from the end. The lead melody is in traditional romantic style, the harmonies are free,

sometimes traditional, sometimes more modern. This whole block, the romantic style and the well sounding orchestration in a traditional sense, is quite exceptional in Zappa's oeuvre. The meters in these last two examples are either regular 4/4 or strings of notes in odd numbered ones as 11/8. Harmonically the material is evidently diatonic, using notes from one or two closely related scales. They can hardly be assigned to keys. The first one contains no harmonic cadences in it and pedal notes are only held shortly or not present at all. The second one does use chords, but in such a way that the piece keeps drifting instead of confirming a key note.

The image shows a handwritten musical score for a piece marked "Fast" in 4/4 time. The score is written on ten staves. The top two staves are for strings, with treble clefs and a key signature of one sharp (F#). The next two staves are for woodwinds, also with treble clefs and a key signature of one sharp. The fifth staff is for brass, with a treble clef and a key signature of one sharp. The sixth staff is for percussion, with a bass clef and a key signature of one sharp. The seventh staff is for Timpani, with a bass clef and a key signature of one sharp. The eighth staff is for a drum set, with a common time signature and a key signature of one sharp. The score features various musical notations, including eighth notes, quarter notes, and rests. There are several triplet markings (indicated by a "3" over a bracket) in the string, woodwind, and brass parts. The percussion part includes a series of eighth notes in the eighth staff. The overall style is handwritten and appears to be a working draft or a composer's sketch.

The world's greatest sinner, soundtrack excerpt #1. Transcription: KS.
All three excerpts: update 2008, deposited at the I-depot, The Hague.

A handwritten musical score for a piece titled "The world's greatest sinner". The score is divided into two sections: "Slow" and "Faster".

Slow Section:

- Staff 1 (Melody):** Treble clef, 4/4 time. Starts with a half note G4, followed by quarter notes A4, B4, C5, D5, E5, F5, G5. Dynamics include *mp* and *p*. A fermata is placed over the final G5.
- Staff 2 (Piano):** Treble clef, 4/4 time. Features a piano accompaniment with a *p* dynamic. Includes a *mp* dynamic marking and a fermata over a final chord.
- Staff 3 (Piano):** Treble clef, 4/4 time. Features a piano accompaniment with a *pp* dynamic marking and a *p* dynamic marking.
- Staff 4 (Bass):** Bass clef, 4/4 time. Features a piano accompaniment with a *p* dynamic marking.

Faster Section:

- Staff 1 (Melody):** Treble clef, 4/4 time. Starts with a half note G4, followed by quarter notes A4, B4, C5, D5, E5, F5, G5. Dynamics include *mp* and *p*. A fermata is placed over the final G5.
- Staff 2 (Piano):** Treble clef, 4/4 time. Features a piano accompaniment with a *mp* dynamic marking.
- Staff 3 (Piano):** Treble clef, 4/4 time. Features a piano accompaniment with a *mp* dynamic marking.
- Staff 4 (Bass):** Bass clef, 4/4 time. Features a piano accompaniment with a *mp* dynamic marking.

The score includes various musical notations such as dynamics (*mp*, *p*, *pp*), fermatas, and slurs. The tempo change from "Slow" to "Faster" is clearly marked.

The world's greatest sinner, soundtrack excerpt #2. Transcription: KS.

The image shows a handwritten musical score for an excerpt from "The world's greatest sinner". It consists of two systems of five staves each. The top staff is labeled "Ova" and has a tempo marking "♩ = ♩." above it. The music is in 4/4 time and the key signature has two sharps (F# and C#). The notation includes various rhythmic values, rests, and dynamic markings like accents and hairpins. The first system shows a complex melodic line in the top staff, followed by more rhythmic and melodic parts in the other staves. The second system continues the piece with similar melodic and rhythmic structures.

The world's greatest sinner, soundtrack excerpt #3. Transcription: KS.

Overture to a Holiday in Berlin/Holiday in Berlin (full blown)

The soundtrack from "The world's greatest sinner" includes two of the four themes that would later on constitute the "Overture to Holiday in Berlin". It forms part of a chain of themes. With the earlier Mothers of Invention, Zappa would often play his themes live in a medley like form, often with solos in between them. He's even reported to drive some of his musicians nuts by coming up with new constructions day after day. I can't verify that in detail, next however are the set ups of three "Holiday in Berlin" sequences from about 1968-1970:

Handwritten musical score for Overture to Holiday in Berlin/Holiday in Berlin, themes 1 and 4. The score is written in treble and bass clefs with a key signature of two sharps (D major) and a 3/4 time signature. It includes various musical notations such as notes, rests, and dynamic markings. Annotations include "Repeats", "Twotimes", "Keeps Repeating", "(Bass continues)", "Bass pauses", and "(drumroll)". The bottom staff shows a drum part with "x" marks and dynamic markings like "p" and "mf".

Overture to Holiday in Berlin/Holiday in Berlin (full blown), themes 1 and 4. Transcription: KS (update 2008, deposited at the I-depot, The Hague). This specific execution is transcribed from:

Theme 1: Holiday in Berlin (full blown), 0:57-1:09.

Theme 4: idem, 1:46-2:25.

- *Burnt weeny sandwich: Overture to a Holiday in Berlin*

0:00 Theme 1. First theme from the transcription in D, being the main theme from "The world greatest sinner". Rhythmically this theme is in straightforward 3/4.

0:24 Theme 2.

0:35 Theme 3.

0:48 Theme 1.

1:00 Theme 4. Second theme from the transcription in D Lydian, originating from "The world greatest sinner". It's played over a steady bass figure, basically giving a D as pedal note. Rhythmically it's the opposite of the first theme: the lengths of the notes keep varying in an irregular way, causing syncopie figures about half of the time. When this theme gets repeated the bass turns into a little riff and accompanying chords get into the picture, played as parallel 5th chords with the third left out.

1:27 End

- *Burnt weeny sandwich: Holiday in Berlin (full blown)*

0:00 Block 1. This is the block that gets reused for the "Overture" and "Would you like a snack?" sections from "200 Motels" in orchestral variations/re-orchestrations. See the 200 Motels section for note examples.

0:46 Block 2. The themes from the Overture return.

2:57 Block 3. Solo in D Lydian with the bass alternating D and E. See "Holiday in Berlin (full blown)" from the Burnt weeny sandwich section of this study for the opening of this solo.

6:23 End.

- *Tenga na minchia tanta from Beat the boots: tracks 12-13*

The sound quality of this semi-officially released bootleg is acceptable, so the word bootleg in this specific case doesn't have to scare you off. These two tracks are of specific interest, first because of the lyrics added to them. They fit in thus well, that it looks as if the song was composed that way, whereas in reality they were added later on. The composition was never called "Holiday in Berlin" from the beginning. Secondly the guitar solo is great. The title "Inca roads/Easy meat", that the bootleggers gave it, is not really wrong, though unlucky. Because the intro and the solo are in D Lydian with the same basic two chord alternation as on "Burnt weeny sandwich", it better could have been listed as a Holiday in Berlin solo.

0:00 Track 12. "Shark, shark, shark" theme from "Fillmore east".

0:38 "Rance Mohammed" bridge of some drumbeat bars.

0:45 Block 1. As above, now with lyrics as on "200 Motels".

1:55 Block 2. Idem, the lyrics refer to the revolting Berlin students during a Mothers concerts.

4:36 End of track 12.

0:00 Track 13. This whole track represents what is block 3 from above with new elements added to it. It starts with a chord alternation of D and E over which Flo and Eddy are improvising.

0:43 Vocal version of one of the later "Inca roads" themes.

1:24 Another solo in D Lydian starts. See the Fillmore East 1970 section for examples from this "solo from Holiday in Berlin".

6:22 Coda.

7:16 End of track 13.

Run home, slow

Things were coming off in 1963. Several singles were released (see also the next section) and Zappa could return to the cowboy motion picture, called "Run home, slow", that now had reached an adequate budget. Mercedes McCambridge would be the protagonist (see www.imdb.com/title/tt0059663 for this movie). To the left a poster, copyright Joshua productions/Emerson film enterprises. Vaguely legible is "music by Frank Zappa".

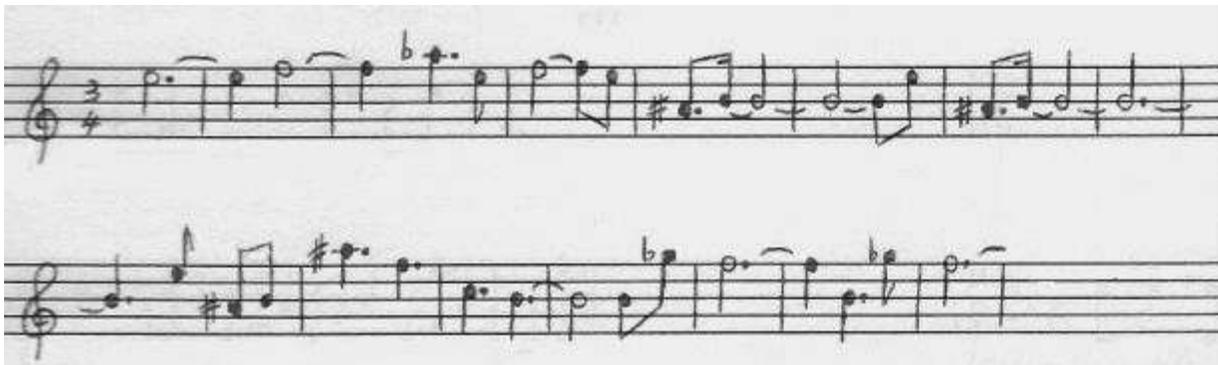
For the same year Zappa had organized a one time performance of some of his modern music pieces at the Mount St Mary's College, that was broadcast on a local radio station: "Mount St. Mary's was the first time I had a concert of my music. As with most other concerts of my [modern] music, I had to pay for it... That was 1962. That was a bargain, though, because it was only \$300. It was a student orchestra. There were probably about fifty people in the audience, and - for some strange reason - KPFK taped it, and I got a

copy... There was one thing called "Opus 5", and there were aleatoric compositions that involved a certain amount of improvisation, and there were some written sections that you actually had to play. Some of the things were graphic, and there was a tape of some electronic music that was being played in the background with orchestra, and I had some 8mm films that were being projected" (Zappa!, page 55). The event seems to have had a duration of 70 minutes and an excerpt of 2:28 minutes has appeared on the posthumously released CD "The Lost Episodes" (1995).

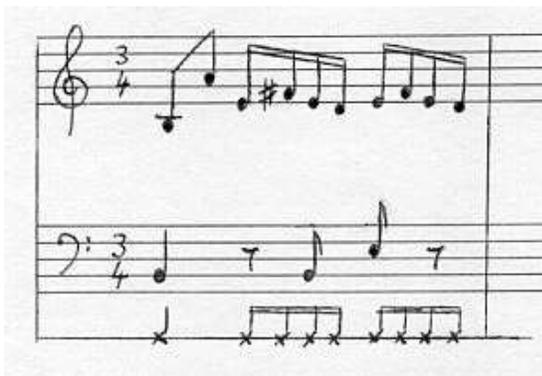
This last CD and "The mystery disc" (1998) also contain sections from "Run home, slow", while "You can't do that on stage anymore, vol. V" has a 1969 performance of "The little march" from "Run home, slow" included. The melody of the "Running Home Slow Theme" and its variation, played in the second half, are given beneath. Played against a steady rhythmic figure in 3/4 the melody itself has an irregular rhythm, giving it a jazzy, quasi-improvised character. The rhythm includes several syncopes and two polyrhythmic bars with two played over three.



Run Home, Slow, melody. Transcription: KS (1st printed edition, 2000).



Run Home, Slow, variation. Transcription: KS (idem).





Run home cues #3, outro, notation without meters. Sketch: KS.

Notes:

- The outro is played with some rubato. I can't see the one conducting, making it impossible to be sure about the meter and rhythm notation straight from CD.
- This whole transcription was included in the 2nd printed version as a "by approximation" one, with the outro notated in 5/4. After relistening in 2006 I decided to withdraw the outro, notated in this manner, and to replace it by a sketch only.

Apart from the theme, two other small excerpts are included on "The lost episodes", called "Run home cues #2" and "#3", while "The mystery disc" includes the original "Duke of prunes" theme from the movie, that would later appear on "Absolutely free" and "Orchestral favorites" (see the corresponding section). YCDTOSA V has the theme played live and "The little march". The "Run home cues #3" is a clear reference to Stravinsky's "Rite of the spring", starting with the uptight beating of a dissonant chord in a varying rhythm. The timpani is ticking eighth notes steadily, but the dissonant chord appears in different positions. This figure lasts 10/4 in total. Probably Zappa's original score has this figure subdivided into two or more bars, but straight from CD it's getting arbitrary to say how. Next the music evolves into some relaxing bars in D Mixolydian with a Cmaj7 chord moving over to a D chord. It's not the standard resolving chord (C), but it does resolve the dissonance of the Cmaj7 chord in a way. Again I can't get to a proper meter notation, this time due to the rubato manner it's being played with.

"The little march" is more remindful of Stravinsky's friendly melodic side. Zappa included a rock band execution of the "Royal march" from Stravinsky's "A soldier's tale" on "Make a jazz noise here". Almost thirty years after the "Little march" recording, Zappa presented another less short march to the Ensemble Modern, called "This is a test", originally called "Stravinsky" (see the Yellow shark section). These two pieces have in common that the scales keep changing and that key notes are mostly absent, so they are marches with a modern flavour.



The little march, opening. Transcription: KS (3rd printed edition, 2007).

Zappa did several references to Stravinsky in his career. In "Status back baby" from "Absolutely free" (1967) he's quoting some bars from Petroushka. A small section of this ballet was also performed live, as presented on the "Tis the season to be jelly" bootleg from the same year.

In 1977 Stravinsky became part of Zappa's on stage comedy acts. During "Titties and beer" the devil, in his conversation with Zappa the biker, attempts to verify his main interest:

FZ: I'm only interested in two things. Let me see if you can guess what they are.

Devil: Well uh...uh, maybe Stravinsky.

FZ: I'm only interested in two things: titties and beer, titties and beer, titties and beer.

Devil: Wrahhh. I think I've come to the wrong guy.

The "Run home, slow" movie itself is an almost forgotten cowboy movie, cheap in various senses, though not as bad as it is mostly reported to be. It starts with villagers capturing and hanging a local villain

Hagen. His three adult children, Nell, Ritt and a hunch-back retard Kirby seek revenge. First they rob the local bank. This would require some action and only gets spoken of, just to indicate how low the budget was. Next they come after the man they hold responsible for organizing the hanging and a little shoot out follows. Ritt gets wounded and they lose their horses. Trying to escape from a posse chasing them, they have to continue on foot through the desert, accompanied by Ritt's frivolous wife Julianne. The group finds haven in a deserted farm house, where things are going from bad to worse. The film has some thirty minutes accompanied by music by Zappa, including repetitions and a sung motif. The soundtrack contains various variations upon material from "Duke of prunes" and "The little march", as well as longer parts of background music for movie sceneries.



Run home, slow, soundtrack excerpt #1. Transcription: KS.
Soundtrack excerpts: update 2009, deposited at the I-depot, The Hague.

Handwritten musical score for guitar, showing a riff in 4/4 time. The score is written on four staves. The first two staves are the first system, and the last two are the second system. The first system has two measures, and the second system has two measures. The notation includes treble and bass clefs, a key signature of one sharp (F#), and a 4/4 time signature. The music features a melodic line in the treble clef and a bass line in the bass clef. The bass line includes a complex sequence of notes and rests, with some notes marked with 'x' to indicate muted strings. Fingering numbers (1-3, 6) are written above notes. A handwritten note in the second system says "Bar 1 repeats several times".

Run home, slow, soundtrack excerpt #2/Right there riff (1963). Transcription: KS.

The image shows a handwritten musical score for a 4/4 piece. The instruments listed are C-trumpet, Vibes, Flute, C-clarinet, E.H., Bassoon, Gong, and Bells. The score is written on eight staves. The C-trumpet part starts with a whole note G4. The Vibes part has a melodic line starting on G4. The Flute part has a melodic line starting on G4. The C-clarinet part has a melodic line starting on G4. The E.H. part has a melodic line starting on G4. The Bassoon part has a melodic line starting on G4. The Gong part has a melodic line starting on G4. The Bells part has a melodic line starting on G4. The score includes notes, rests, and dynamic markings like 'Bass drum, softly' and 'Etc.'.

Run home, slow, soundtrack excerpt #3. Transcription: KS.

Notes:

- All instruments are notated as C-instruments.
- The 4/4 meter is my notational choice.
- The indication of the instrumentation can be off. I'm not that good at identifying instruments, let alone distinguishing a Bb from an Eb clarinet.

Run home, slow, soundtrack excerpt #4. Transcription: KS.

Above are four excerpts from the soundtrack that haven't been released on CD, at least not in this form. The first sample is played a couple of times during the movie. It's build over two large 11th chords in E Dorian. They are played as arpeggios and keep alternating. Over these two chords a short melancholic melody is played, depicting the depressing tone of the movie. It's related to "The original duke of prunes" in the sense that the latter is also a slow melody played over two alternating arpeggio chords (see the *Orchestral favorites* section for more). The second example is a merry little march of two short themes, each of one bar. Both themes exist in two variants, slightly different from each other. In a faster version

it's known as the riff from "Right there" ("You can't do that on stage anymore, vol. V"). Bars 1-2 have a chromatic element in it with the descant downwards movement D-C#-C natural-B. Bars 3-4 stay in one scale except for the F going to an F# at the end. A key note can't be identified. The third excerpt is functional music for a movie scene, rendering an atmosphere of isolation when the Hagen family is passing through the desert on foot. It's accomplished by atonal modern ensemble music in a slow hocketing style. The last example is a larger three-part melody in strict 3/4, dealing with refined harmonies. The bass line is a direct part of the harmony, being in the same rhythm. Sometimes it does this via a direct parallel movement, sometimes by following a counterpoint line and sometimes by building an arpeggio chord. The oboe is playing long held soft notes over the other two parts, becoming louder towards the end. In bar 1 this miniature starts off quite normal with a sequence of 5th chords in E Dorian; bar 2 is also made up of 5th chords. From bar 3 onwards things are gradually becoming more volatile. 7th and larger chords enter the picture, or chords with passing-through notes, depending on how you would like define things. Notes become natural and sharp again. The melody sometimes jumps, for larger parts it moves as a wave.

Both above soundtracks are uneasy to obtain. Apart from the "Run home, slow" examples on his own CDs, most Zappa fans only know of the existence of these scores. As for most of his projects, each one brings out new aspects of his musical horizon, and this also applies to these two early ones. I only got to know these works better in 2008, being a sort of revelation.

Other tracks from The mystery disc

The music from "The mystery disc" was originally released in the shape of two bonus albums for "The old masters vol. I and II". In 1998 it was released by the Zappa Family Trust (ZFT) as an individual CD. Tracks from this CD are coming by in this section and the Projects section. In total the following songs are included in this study, next to the tracks from above:

- "Original Duke of prunes": this piece gets dealt with in the Studio tan section.
- "I was a teenage maltshop": the demo for this opera gets described in the Projects section.
- "Metal man has won his wings": another blues improvisation with Don Van Vliet, included in the Paul Buff section.
- "Bossa Nova pervertamento": this title is included in the same section.
- "Speed-freak boogie": two examples from this solo are included in the Paul Buff section.
- "Mondo Hollywood": an excerpt from this solo is included in the Projects section.
- "Agency man": the opening of this song gets dealt with in the Uncle Meat section.

Singles (1962-1964)

In 1961 Zappa first met Paul Buff, who was running a recording studio at Cucamonga. Paul was one of the first to operate a multi-track recorder. Their working relationship intensified in 1963, when they began collaborating for releasing singles. Zappa was involved as player, producer and songwriter. Their biggest success became Buff's Tijuana surf, with Zappa's Grunion run on the b-side. In 2009 Paul opened his Pal and Original sound archives on line, bringing to the public some yet unreleased recordings by Zappa. The money coming in from the Run home, slow, movie gave Zappa the opportunity to take over Buff's studio. He started working on a film project himself, but got thwarted by local officials. A set-up got constructed for arresting him for recording pornographic material. He got a minor sentence and actually had to spend a couple of days in prison. This was sufficient to block his business in Cucamonga.

PAL AND ORIGINAL SOUND: WORKING WITH PAUL BUFF

Zappa soon realized that he would never make a living out of modern compositions and at the age of twenty he started composing rock music and jazz. He continued playing guitar in several bands and started to record pop and jazz music in a studio called Pal Records in the small desert town Cucamonga, owned by Paul Buff. After Zappa purchased the Studio in 1964 it was renamed as Studio Z.

Take your clothes off while you dance

One of the early Cucamonga tapes to survive is "Take your clothes off while you dance" from 1961. This song would first appear on "We're only in it for the money" and "Lumpy gravy". The original recording is included in "The lost episodes", where it is described as a jazz composition. Other than in the "Run home slow theme", the jazz effect lies here more in the accompaniment than in the melody itself. Furthermore the choice of instruments and soloing in it are typically jazz. On the "We're only in it for the money" version with lyrics however, these jazz ingredients are gone and the piece has become a pop song. This version is another example of Zappa's returning use of parallels, here forming fourths, thirds and a few fifths. It's in C Dorian. In bars 11-12 a sequence of minor thirds is formed, thus in a more chromatic set-up. For the closing chord Zappa chose to land on VII instead of I.

Paul Buff: "He just came in one day in 1960, when he was around 20, as a person who wanted to record some jazz. He had some musicians, and wanted to rent a studio. Probably the first year I was associated with him he was doing a combination of recording jazz, producing some jazz records, and was also writing some symphonic material for a local orchestra that was supposed to record some of it. He was very jazz-oriented ... He played clubs, and played all the jazz standards ... He did a lot of original compositions, and he'd play things like 'Satin doll' for a few dollars and a few beers" (Lost episodes booklet).

The image shows a handwritten musical score for the song "Take your clothes off while you dance" by Frank Zappa. The score is written on a five-line staff system. The top staff is the vocal line, the middle staff is the bass line, and the bottom staff is the guitar line. The key signature is one flat (Bb) and the time signature is 4/4. The bass line includes handwritten notes such as "Bass: C", "C", "D", "D", "Eb" and "Bass: Eb", "D", "G", "C", "C", "Bb". The guitar line includes handwritten notes such as "Bass: C", "C", "D", "D", "Eb" and "Bass: Eb", "D", "G", "C", "C", "Bb". There are also handwritten notes like "etc." and "etc." throughout the score.

Take your clothes off while you dance (1961 version), theme. Transcription: KS (2nd printed edition, 2001).

Any way the wind blows

Also on "The lost episodes" is a 1963 recording of "Any way the wind blows", that would later appear on "Freak out" and "Cruising with Rubin and the jets". It's a regular two-theme pop song with chord progressions. The opening theme is built upon a I and VI alternation in G. The second theme is accompanied by sung "doo-wop" harmonies.

The recording shows Zappa as a multi-instrumentalist, playing bass, drums and guitar. Paul Buff was a pioneer in using a multi-track recorder, making things like this possible by overdubbing. I'll get back to overdubbing in the Hot Rats section.

Any way the wind blows (1963 version). Transcription: KS (2nd printed edition, 2001).
 Note: the sung melody is actually an octave lower than I notated above.

Why don'tcha do me right

In collaboration with Greg Russo, Paul Buff has started a project to open up his archive for the public in 2009. It carries the title "Paul Buff presents the Pal and Original Sound studio archives". The collection got eventually divided over 20 CDs, all downloadable at <http://www.cdbaby.com> (image of Vol. I is shown on-line). The price of a dollar per song or 10 dollar per CD doesn't have to stop anybody. The collection contains, among many others, various rarities in which Zappa had some part, either as songwriter or as producer or as guitar player. For an overview, visit http://globalia.net/donlope/fz/related/Paul_Buff_Presents.html. They fill in the gaps regarding the singles that were left by for instance the "Cucamonga years" CD from the next section.

Why don't you do me right (Pal Studio), section. Transcription: KS.
 All three transcriptions: update 2010, deposited at the I-depot, The Hague.

There are a few previously unreleased pieces included as well. One of the included tracks is an early studio jam version of a piece called "Why don't you do me right". It's a song that, with this one added, now exists in three versions that are much different in character. It's build around a single lick in 12/8 with various variations upon it. The different phrases of the lyrics always have two accents. In the examples below the texts are for instance "I KNOW you're tryin' to WRECK my life" or "why DON'T you do me RIGHT". In the Pal Studio version the downbeat lies at the first accent, which is determined by how the lower accompanying guitar plays in staff 3. The accentuated notes are indicated. Particularly bar 2 leaves no other option than putting the downbeat at this point. In both the "Joe's XMasage" and "Absolutely free" recordings however the downbeat lies at the second accent of the phrases of the lyrics. Both the Pal Studio and "Absolutely Free" are in G minor (or Dorian, the E/Eb that makes the difference is avoided). The "Joe's XMasage" version, another studio jam, is in F Dorian and played much faster. It contains two vocal and two instrumental parts. Zappa sings the notes in the mid-range (staff 2). In the CD's liner notes a certain Floyd gets credited for the part in staff 1. He either sings the low notes (bar 1) or the high notes (from bar 2 onwards). The rhythm of the main phrase on "Joe's XMasage" is slightly different, in the sense that "don't" is song before beat. This syllable thus gets extra long. The accompaniment here is basic. The guitar is mostly playing a steady Fm chord on beat, every now and then alternated by the Bb chord. The piano is more improvised like and only vaguely audible (like in staff 3 of bar 6). The version on "Absolutely free" is the final version, released by Zappa in 1967. At first only as a single, later also on the CD re-release of "Absolutely free". For this one Zappa gave the song more body by including a newly written bass line (staff 3) and a guitar solo half way. For the bass he applied a fuzztone, as he had first done for the "Jessie Lee" single from 1964.

14 Fast

mf - - right - -
Why don't - -
mf Why don't - -
mp
As bar 1
Etc.

f
p
As bar 1
Etc.

Why don'tcha do me right (Joe's XMasage), section. Transcription: KS.

Why don'tcha do me right (Absolutely free), section. Transcription: KS.

Walkin' out - Waltz

Next are two examples of recordings uniquely preserved via Paul Buff's archive. Both have Zappa soloing over familiar patterns. The first one ("Walkin' out") is mainstream pop, using varying scales. It starts in D Mixolydian in bars 1-2 with the chord progression I-VII-I. This progression is repeated in bars 3-4, but now in A Mixolydian. Bars 5-6 repeat the pattern of bars 1-2. In bars 7-8 we have I-VII-I in E Mixolydian. From bar 9 onwards we get at a new block. It's in A Mixolydian with a two-bars progression I-VI-VII-VII-I-VII.

II Guitar Solo →

37

Repeats

Repeats

svab.

III Loco

Repeats

Bar 4 repeats

Repeats

Repeats

Bar 4 repeats

Repeats

svab.

III

Bar 9 repeats

Bar 10 repeats

Bar 9 repeats

Bar 10 repeats

svab.

Walkin' out, section. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

11 Guitar

12 pva->

Asbar 5

13 pva->

19 pva-> 5-5-

Repeats

Waltz, section. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

The second example is a jazz piece, simply called "Waltz". It's called a waltz because, most of the time,

it's in 3/8. Stylistically it has nothing in common with the 19th century waltzes. "Sofa" and "Strictly genteel" are later pieces in 3/4 that are closer to traditional waltz writing. This one is typical jazz in a smaller combo form, a rather unique recording in Zappa's oeuvre. It supports what Paul Buff said above that Zappa at that time played the jazz standards. For the accompaniment it has a so-called walking bass part and chords that sometimes deviate a little from the main key by playing altered notes. The drummer mainly uses the cymbals. The main key is D Dorian for bars 1-14 and D Mixolydian for bars 15-21. Above to the right: Zappa playing guitar around 1963.

Speed-freak boogie

"Speed-freak boogie" is an instrumental track with only guitars. It can be found on "The mystery disc" as a recording from 1962. Zappa plays the lead guitar and rhythm guitar, while Doug Moon gets credited for a second acoustic rhythm guitar. This must be the bass line then. It's in E Dorian; in bars 2-3 of the example the lead guitar is for a moment playing chromatically. The first example is the opening of this piece with the bass line getting identically repeated. The second example is from the middle of the song. Now you've got four parts. The bass has started varying its theme. The lead guitar is getting really high. Seen the range of this lead guitar in both examples it's most likely that Zappa doubled the frequency of staff 1, but not the speed. When you play the second example an octave lower, it gets normal, but when you would turn down the speed to half as fast too, it becomes unnaturally slow. Probably Zappa turned up the speed to a degree. The bass line goes normal. The third "normalized" midi file (on-line version) has staffs 1 and 3 of the second example an octave lower and the speed of the whole brought back to 85 % of CD version.

Speed-freak boogie, opening. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

12

Vla

Repeats

14

Vla

16

Vla

18

Vla

7

Previous page: Speed-freak boogie, section. Transcription: KS

On "The mystery disc" it gets described as "an example of multiple overdubs and half-speed recording, circa 1962. F.Z. sped-up lead and rhythm guitar, Doug Moon, rhythm acoustic guitar". I know too little of recording techniques to tell how exactly "Speed-freak boogie" got into being.

Metal man has won his wings - Tiger roach

"The lost episodes" and "The mystery disc" are not only of interest for Zappa's early history, but also for the beginning of Don Van Vliet's career. They were friends since highschool and their relationship went up and down afterwards. Sometimes they collaborated, sometimes they lost contact with each other. To the right a photo of them from the sixties by Barrie Wentzell (used with permission). I already included "Lost in a whirlpool" in the Zappa's teens section, very likely the oldest recording of them playing together. Next are two more examples of blues pieces.

Both songs are following the blues pattern in its standard form. They are of interest for Zappa trying to achieve a raw blues sound during his soloing. He send a demo tape to a record company, where it got rejected for sounding "distorted". This was happening in 1963 and the guy involved couldn't have had an idea what role this type of "distortion" would get to play in rock music. It's a bit like fermenting foods. Mostly it gets really rotten, sometimes something very new and special comes out of it. It's something I can't duplicate in midi format, so the two files from the on-line version of this study represent the "undistorted" version. Both songs are also examples of switching between major and minor, a factor that happens more often in blues. I've notated "Metal man has won his wings" in E Mixolydian, but it can just as well be notated in E Dorian (the example contains a section with IV-I-V-IV-I from the blues scheme). The G natural and G sharp are both being used without one of them getting the upper hand. The meter is 12/16, being four subdivided into three, but sometimes you can also encounter beats subdivided into two. "Tiger roach" is basically E Dorian, but with occasionally major chords turning up. Bars 1-4 are played along the Em chord, bar 9 on the other hand features the E chord. In bar 10, step V of the blues scheme, a B chord from E major is played instead of the Dorian Bm chord. Upon steps I and IV it's almost solely the minor pentatonic scale that is being used, so this example can also be seen as blues involving minor pentatonic blocks. The rhythm section is playing in a very elementary manner through the blues scheme, almost like a schoolbook example. Its straightforwardness gets to a point compensated by the fast tempo. The only notable thing about the rhythm is the meter change. It moves from 4/4 to 3/4 in the fourth bar of the scheme and back to 4/4 in the eighth bar of the scheme. The example above contains one complete cycle of the blues scheme, as played at the end of this song. More on blues in the Imaginary diseases and Bongo fury sections.

On both recordings Zappa credits only himself as guitar player, which means that he must have overdubbed his original guitar track one or two times with another guitar part. Don is singing in his peculiar sharp nasal manner, sometimes taken to the point of shouting loud. The lyrics were all improvised on the spot and derived from comedy book pages. At this point they tried to get a record contract as The Soots with songs as included in this section. Eventually they succeeded on their own, shortly after each other. Zappa and Beefheart are both considered to be avant-garde composers by many. Musically they have little in common. Beefheart had his starting point in pop-music, but developed it towards an innovating personal style. His characteristic songs include frequent changes of motives, where the rhythm section is playing its own part instead of obeying to the standard support function they have for the lead instruments. At first hearing it can make some of his compositions sound as if he is trying to play two songs at once. Zappa was the more intellectual composer, who wrote scores and who was multi-everything in about every aspect. Their names are closely tied together. Beefheart is often coming by in articles about Zappa. Since Zappa was commercially more successful and better known, it's virtually impossible to read

something about Beefheart without Zappa being mentioned. More on their collaboration in the Bongo Fury section.

The image shows a handwritten musical score for the 'Metal Man Has Won His Wings' section, measures 1 through 6. The score is written in G major (one sharp) and 4/4 time. It features five staves: Don (bass), three Guitars (treble clef), and Bass (bass clef). The Don part has lyrics: 'Whaka--', 'Looking--', and 'Good--'. The Guitars part includes the instruction 'Others repeat bar 1' and 'As staff 3'. The Bass part has the instruction 'As staff 3'. The score includes various musical notations such as accidentals, stems, beams, and fingerings (e.g., '2', '3', '2-1').

Metal man has won his wings, section. Music: FZ, words: Don Van Vliet. Transcription: KS (update 2016, deposited at the I-depot, The Hague).

1 Fast

Don: -ugh-ah- What's... (Triplet)

Guitar

Bass: As bar 1 As bar 1

5

Don

Guitar

Bass

19

Don: Tiger roach.

Guitar: (Triplet)

Bass

Tiger roach, end. Music: FZ, words: Don Van Vliet. Transcription: KS (update 2016, deposited at the I-depot, The Hague).

CUCAMONGA YEARS: SINGLES AND BROADCAST MUSIC

Next to movie scores, singles, radio and TV appearances were giving Zappa opportunities to make himself and his music known to the public. It would last till 1966 before he had a regular record company contract, by many seen as the start of his career as a pop star. But when you're adding everything up from all available sources, a lot had already happened before 1966, sufficient to spend five sections of this study on the period 1958-1965.

BROADCAST MUSIC 1962-1963

Steve Allen show - Mount St. Mary concert - Opus 5

Frank Zappa and Steve Allen Zappa applied several times in vain for a guest appearance with his band on the Steve Allen show, a then popular TV talkshow. When he suggested an absurdity for playing "Bicycle for two" he did get in. The tape has been kept completely in the Channel 5 archives (still to the left, 1962). Zappa's appearance lasted 13 minutes, doing some funny entertainment with Steve Allen cooperating. The music was a collage of Zappa and Allen extracting sounds from the bikes with their hands, bows and drumsticks. Along with it came a pre-recorded tape with among others Zappa's first wife playing a clarinet, electronically mutated. The orchestra could improvise and were asked to "refrain from musical tones" by Zappa.

Experimental collage music was also on the program for the Mount St. Mary concert from 1963. This time it was serious. Zappa spend quite some time explaining to the audience what the set-up of the different pieces was. A necessary move, that helped to make the audience receptive to the ideas presented. The centre piece was "Opus 5". Zappa had written out separate music for the piano and three different groups from the Pamona Symphony Orchestra, the music divided over several smaller theme blocks. First the three and a half minutes piano part was played separately. It's entirely atonal, playing with motifs, intervals and tempi. Presented below is a section taken from it. The piece has the character of a written out improvisation. It's through-composed without central themes. Bars 1 and 2 are variations upon each other. Bar 3 is transitory. Bars 4-11 form a sequence in 4/8. Bars 12-16 are a sequence in 3/8.

The other groups had similar sheet music. The conductor of each group could indicate what block to play at will, pause or ask his group to improvise. Thus the piece is highly flexible. It would sound different each time played. Anew a pre-recorded tape with modified sounds was included as part of "Opus 5". Zappa presented a section of the tape played solo as well. After the short intermission of the one hour concert "Opus 5" was played in full. The "Mount St. Mary concert excerpt" on "The lost episodes" is made up of sections from its execution. Without Zappa's introduction it sounds as a nice but rather haphazard collage of sounds. With it the idea of the experiment becomes understandable. The concert got broadcast by the L.A. radio station KPFK. Though the original tape is not present anymore in their archives, the concert has survived because one or maybe more people made a cassette recording of the broadcast.

Tempo I, moderate

Tempo II, a bit faster

1 pva

Tempo I

2 pva

rall. --- Tempo III, much slower

3

4 15ma-->

Opus 5, piano part, section. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

SINGLES 1962-1964, OVERVIEW

During his stay in Cucamonga Zappa cooperated with Paul Buff and others to release various singles for the local market. They contain traditional rhythm and blues and doo-wop music with fantasy group names as "Baby Ray and the Ferns". Presented below are "Memories of El Monte" for a doo-wop example and "Grunion run" for a track with the bass following the blues scheme. These singles are some of the few recordings that the Zappa family trust doesn't have the copyrights of. During recent years these tracks have appeared on small labels with titles as "Cucamonga Years" or "Rare Meat". Listed below are the ones for which Zappa contributed in songwriting. The artist on the B-side is the same as on the A-side, unless indicated. Three of them have had some success. "Memories of El Monte" got a few times re-released or included in doo-wop collections. On the "Cucamonga years" CD it's attributed to 1962, other sources state that it stems from 1963. Paul Buff's "Tijuana surf" became a hit in Mexico with Zappa's "Grunion run" on the flip side (to the right an issue as EP, anonymous eBay posting). "Love of my life" is the one that Zappa would re-record three times later on. The single version was brought out by David Aerni. It had a newly recorded vocal part in it with revised lyrics. As it comes to whether this was done with Zappa's approval, he wrote me in May 2011 assuring that "I had the greatest respect for FZ and would have never done anything without his approval. This was many years ago and I don't remember the circumstances, but rest assured nothing was done without Frank's approval." The preceding first recording, that is included in the ZFT release "Greasy love songs", has exactly the same lyrics as Zappa's later versions. Paul Buff mentions in his comment upon the single (<http://www.cdbaby.com/cd/PaulBuffVariousArtists>) that the original

recording was sung by Ray Collins, so that's very likely the "Greasy love songs" one featuring Ray Collins and Mary Gonzales. Of the two midi examples, included on-line without much further comment, the first ("Memories of El Monte") is a doo-wop song by Zappa and Ray Collins and the second one ("Grunion run") a blues instrumental in C Dorian.

Singles from 1962 - Breaktime - Memories of El Monte

The image shows a handwritten musical score for the 'Breaktime' section. It consists of three staves: Guitar 1, Guitar 2, and Bass. The key signature is B-flat major (two flats) and the time signature is 4/4. The tempo is marked 'Fast'. The score includes dynamic markings such as 'f', 'mf', 'p', and 'mp'. There are also performance instructions like 'A bit slower' and 'vab.'. The notation includes various guitar techniques like triplets and slurs, and bass line patterns with 'x' marks indicating specific notes or techniques.

Breaktime, section (R. Williams, P. Buff, Zappa). Transcription: KS (update 2011, deposited at the I-depot, The Hague).

- A Sixteen (M. Travis) by The Masters
- B Breaktime (R. Williams, P. Buff, Zappa)

The instrumental "Breaktime" is a joint improvisation by Ron Williams, Paul Buff and Zappa. If I'm not mistaken Ron Williams is playing the first guitar in the transcription and Zappa the second. The transcribed section contains traditional fifties rock over a walking bass line. It has no clear key note, but tends towards C Dorian for its last two bars at the end. Both Williams and Zappa are playing on beat consistently and their style is the same. Williams even copies a lick by Zappa. Zappa plays G-C-Bb-G-C-D, starting on beat 4 in bar 2. Williams repeats this as G-C-Bb-G-C-Eb, starting on beat 4 in bar 3. "Breaktime" was recorded a couple of months after the "Greatest sinner" score, but released earlier. It thus has the credit of being the first Zappa recording to reach the market. "Memories of El Monte" is in 6/8. The harmony follows a traditional cadence in G: I-IV-V and next via C+E back to I. Staves 2-3 represent the doo-wop harmony vocals.

Handwritten musical score for the first system, featuring a vocal line and a guitar accompaniment.

Vocal Line: Treble clef, key signature of one sharp (F#), 6/8 time signature. Lyrics: "Ih alla-lohe-... Feeling...".

Guitar Line: Bass clef, key signature of one sharp (F#), 6/8 time signature. Includes a section of chords marked "mp" (mezzo-piano) and "Etc." with "Chord: G G" written below.

Staff Labels: "Embassa" is written below the first and fifth staves.

Handwritten musical score for the second system, featuring a vocal line and a guitar accompaniment with a chord chart.

Vocal Line: Treble clef, key signature of one sharp (F#), 6/8 time signature.

Guitar Line: Bass clef, key signature of one sharp (F#), 6/8 time signature. Includes a chord chart below the staff.

Chord Chart:

Chord: C	D	C M3rd	G	G	C	D	C M3rd
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Staff Labels: "Embassa" is written below the first staff.

Memories of El Monte, opening (Zappa/Collins). Transcription: KS (3rd printed edition 2007).

A Memories of El Monte (Zappa, R. Collins) by The Penguins
 B (depending on release)

Singles from 1963 - Love of my life - Grunion run

A Tell me (K. Williams) by Ron Roman
 B Love of my life (Zappa, D. Aerni)

The single version of "Love of my life" used to be an obscurity, not included in any CD collection till it was made downloadable by Paul Buff (see above). You can find images of the various singles in Greg Russo's Cosmic Debris book. It has the lyrics adapted by David Aerni as mentioned above, which is why you see his name between brackets on only this version. The other three versions, that are available in Zappa's CD collection, are by Zappa alone. The first stems from "Cruising with Ruben and the Jets". On this album it's a straightforward performance with a doo-wop voice in the bass all through. The chords are played as continuous eight notes in a 12/8 meter, or - when you're notating in 4/4 - ongoing triplets. Ian Underwood thus gets credited for playing these killer triplets. They are killing, not because there's any difficulty in them, but for their repetitiveness. Zappa deliberately sought for simplicity on this album. In the above "Tinsel town rebellion" version the doo-wop element is mostly gone, only present in the bass voice of the introductory bars 1-4. The chords are now played in an improvised manner. For the main theme the basic pattern is an alternation of an E and an Fm chord in E. For the second theme from bar 13 onwards it's A, Am, E etc. Another ear catching ingredient is the audacious falsetto voice. Towards the end the singer here (Bob Harris) gets an extra applause for his exuberance. The last version from "YCDTOSA IV" was recorded at the Mud Club, N.Y.C. The sound quality is less, apparently recorded with some two track recorder at hand, but it nicely represents the atmosphere of playing in a smaller club house. It goes much like the "Tinsel town rebellion" version, though the falsetto voice is absent.

Handwritten musical score for a piece in D major (two sharps) and 12/8 time. The score is divided into three systems, each with a measure number in a box at the top left.

System 1 (Measure 1):

- Staff 1 (Soprano):** Melody with lyrics "Ah—, Love of —".
- Staff 2 (Alto):** Melody with lyrics "Thank you." and "Da dom. —".
- Staff 3 (Bass):** Bass line.
- Staff 4 (Piano):** Chords with annotation "Like bar 1".
- Staff 5 (Double Bass):** Bass line with annotation "Like bar 1".
- Staff 6 (Ambassa):** Bass line with annotation "Ambassa".

System 2 (Measure 14):

- Staff 1 (Soprano):** Melody with annotation "Others: Like bar 2".
- Staff 2 (Alto):** Melody with annotations "Love of my life," and "Like bar 1".
- Staff 3 (Bass):** Bass line with annotation "Like bar 2".
- Staff 4 (Piano):** Chords with annotation "Like bar 2" and a triplet of eighth notes.
- Staff 5 (Double Bass):** Bass line with annotation "Love of my life,".

System 3 (Measure 7):

- Staff 1 (Soprano):** Melody with annotation "Like bar 1".
- Staff 2 (Alto):** Melody with annotation "Like bar 2".
- Staff 3 (Bass):** Bass line with annotation "Like bar 1".
- Staff 4 (Piano):** Chords with annotation "As bar 5".
- Staff 5 (Double Bass):** Bass line with annotation "As bar 5".

Handwritten musical score for the opening of "Love of my life" (1981). The score is in G major (one sharp) and 4/4 time. It features a vocal line (top staff), a guitar line (second staff), a bass line (third staff), and a double bass line (bottom staff). The first system is marked with a box around the number "10" and the text "Jumps to 0:55". The second system is marked with a box around the number "14" and includes the handwritten notes "(irr. rhythm)", "As bar 13", and "As bar 15". The double bass line is labeled "Dva.b." and "Dvabassa".

Love of my life (1981), opening. Transcription: KS and others (update 2009, deposited at the I-depot, The Hague).

This specific Tinsel town rebellion version is transcribed by me; the basic melody is also present in the Ludwig study and two arrangements send to me by Stefan Boerboom and Irma Haerkens.

A How's your bird (Zappa) by Baby Ray & the Ferns

B The world's greatest sinner (Zappa)

A Dear Jeepers (Zappa) by Bob Guy

B Letter from Jeepers (Zappa)

A The big surfer (Zappa) by Brian Lord & the Midnighters
 B Not another one! (D. Aerni, P. Buff)

A Hey Nelda (Zappa, R. Collins) by Ned & Nelda
 B Surf along (Zappa, R. Collins)

A Tijuana surf (P. Buff) by The Hollywood Persuaders
 B Grunion run (Zappa)

Handwritten musical score for "Grunion run, opening". The score is in B-flat major (one flat) and 12/8 time. It consists of three systems of music.

- System 1 (labeled '1'):** The treble clef staff contains a melodic line starting with a quarter rest followed by eighth notes. The bass clef staff contains a bass line. A handwritten note says "Bass plays parallel ismabassa". The first measure of the treble staff is marked "Bar 1 repeats".
- System 2 (labeled '4'):** The treble clef staff continues the melody. The bass clef staff continues the bass line. The first measure of the treble staff is marked "Bar 1 repeats".
- System 3 (labeled '8'):** The treble clef staff has a more complex melodic line with many eighth notes. The bass clef staff has a bass line with some chords. The first measure of the treble staff is marked "Bar 4 repeats".

Grunion run, opening. Transcription: KS (3rd printed edition 2007).

The blues scheme here is: I (bars 1-4), IV (bars 5-6), I (bars 7-8), V (bar 9), IV (bar 10) and back to I

again in bar 11. Notable is the change of the rhythm in bars 9 and 10 via the accentuated notes, while the bass keeps using the standard subdivision of a bar into 4.

Singles from 1964 - Jessie Lee

A Every time I see you (Zappa, R. Collins) by The Heartbreakers

B Cradle rock (W. Galleges)

A Mr. Clean (Zappa) by Mr. Clean

B Jessie Lee (Zappa)

Jessie Lee, section. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

Jessie Lee is a short rather simple song with only one theme. The bass pattern repeats every four bars, whereas the chords do a two bar alternation of I and VII in G Mixolydian. The fuzz bass moves as: G (bar

2) an octave up to F (bar 3), via C back to G (bar 4), via A a second lower to F (bar 5) and via A to the starting point F again (bar 6). In the Barry Miles biography there are quotes of both Buff and Zappa about the fuzztone bass in this song. Buff: "Zappa loved the sound, I thought it was just ugly noise". Zappa: "He (Buff) had the first fuzztone I ever saw. He had taken the pre-amp from a phonograph and he was running a Sears-Roebuck bass through it. And it was a great fuzz bass. That was the first time I ever saw anybody do a direct fuzz on a recording." He would use the fuzz bass one more time on "Why don't you do me right" (included in the "Absolutely free" CD).

THE MYSTERY DISC #2: PROJECTS

In the summer of 1964 Zappa received the fee for his scores for the Run Home Slow movie and got some financial capacity. He took over Studio Z from Paul Buff, achieved second hand filmmaking equipment and bought a pick-up truck. He had a driver's license for a while before he let it expire in 1967, because he didn't feel like standing in line for four hours anymore to have it renewed (CNN interview with Larry King, 1989). He now aimed at bigger projects than releasing singles.

I WAS A TEENAGE MALT SHOP

The first idea was to write the music and script for an album featuring a teenage opera, called "I was a teenage maltshop". In December 1964 a demo was turned down by the record company he had contacted earlier, so the project didn't get completed. Nevertheless it can be reconstructed to a degree from the "Mystery disc" and later albums by Zappa himself, "Joe's XMasage" by the ZFT and bootleggers, who apparently got a hand on copies of the demo. Biographer Neil Slaven describes the demo in his book and it used to be mostly known via the Apocrypha bootleg. Since 2009 these tracks have become part of the "Beat the boots III" series, downloadable at amazon.com and i-tunes. They can be found on disc I from this set. The pieces that are part of it or related to it are:

- Joe's Xmasage: The uncle Frankie show. This is a local radio presentation by Zappa about the story of the opera and various alternative plots.

I was a teenage malt shop

- Mystery disc: I was a teenage malt shop. This would have been the intro for the opera, an easy going piece for piano with some guitar and drum accompaniment. When he started with following the harmony classes at his high school he first only had the school's piano available to check out how the notes on paper sounded. He never became a good keyboard player, but this type of playing he could do himself. "Zoot allures" is another album with him playing keyboard parts. There was a piano present at Studio Z and later on in the sixties he would buy a Bösendorfer. "I was a teenage maltshop" starts in D Dorian because of the D pedal note, held during bars 1-4. Over this pedal note a IV 7th-VII-IV-(VII or II)-IV progression gets played. Without the D it goes more like a normal cadence in G Mixolydian, so the D is a bit of a stranger here. Bars 5-8 are in C and bars 9-10 in D major or Mixolydian (there's no C or C# to determine which one is it), again because of the lower bass notes.

His compositions specifically for piano are few. The specific purpose of the Bösendorfer was to try out orchestral scores, as you can see him doing with Ian Underwood in a 1971 VPRO documentary about the making of "200 Motels". This one you can try as an untalented player. A lot further go the two piano pieces from "Burnt weeny sandwich" (1970) and the piano duet "Ruth is sleeping" from "The yellow shark" (1993). Examples are included in this study.

- Mystery disc: The birth of Captain Beefheart.

I was a teenage maltshop. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

Note: after relistening I noticed I've notated the F in the wrong register a couple of times: in bar 5 the F is an octave higher and in bars 6-8 it should be an octave lower.

Status back baby

- Absolutely free/The Pal and Original Sound studio archives: Status back baby. A regular popsong in 4/4 (or 12/8 for notational ease to avoid the many triplets in 4/4). The demo version is present in the Pal and Original Sound archive (see the previous section). This original version, that carried the title "I'm losing status at the high school", was sung by Allison Buff. Zappa overdubbed her voice by a track, that is sped up an octave. It goes synchronous so it was either sung over this piece played half speed or Zappa already had means to change the speed without affecting the pitch. This version begins in Eb Mixolydian in bars 1-3 and then continues in F minor. On "Absolutely free" the accompaniment goes different and there are several interrupting extra bars, of which a quote from Stravinsky's "Petrouchka" has drawn the most attention. The latter version begins in C and has some meter changes.

1

Alto Speed up vocal 3

Lead vocal *mf* high school, --

mf I'm losing --

p Etc.

mf

Alto Etc. follows staff 2

mf *p* *mf*

16

p *mf* *p* *mf*

Others continue as bar 5

As bar 1

I'm losing status at the high school, section. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

Handwritten musical notation for the first system, consisting of three staves. The top staff is in treble clef with a 12/8 time signature, containing a rhythmic pattern of eighth notes. The middle staff is also in treble clef with a 12/8 time signature, containing a similar rhythmic pattern. The bottom staff is in bass clef with a 12/8 time signature, containing a rhythmic pattern. Annotations include "Bar 1" written between the top and middle staves, "repeats alike" written below the middle staff, and "plays parallel as in bar 1" written below the middle staff in the second measure.

Handwritten musical notation for the second system, consisting of three staves. The top staff is in treble clef with a 6/8 time signature, showing a key signature change to one flat (Bb) and a melodic line. The middle staff is in treble clef with a 6/8 time signature, showing a key signature change to one sharp (F#) and a melodic line. The bottom staff is in bass clef with a 6/8 time signature, containing a rhythmic pattern. An annotation "Repeats" is written above the middle staff in the second measure.

Handwritten musical notation for the third system, consisting of three staves. The top staff is in bass clef with a 12/8 time signature, containing a rhythmic pattern. The middle staff is in treble clef with a 12/8 time signature, containing a rhythmic pattern. The bottom staff is in bass clef with a 12/8 time signature, containing a rhythmic pattern. An annotation "Bass" is written below the bottom staff in the first measure.

Handwritten musical notation for the fourth system, consisting of three staves. The top staff is in treble clef with a 9/8 time signature, containing a melodic line with slurs. The middle staff is in bass clef with a 9/8 time signature, containing a rhythmic pattern with a key signature change to one sharp (F#). The bottom staff is in bass clef with a 9/8 time signature, containing a rhythmic pattern. An annotation "Bass" is written below the bottom staff in the first measure.

Previous page: Status back baby, theme. Transcription: KS (update 2007, deposited at the I-depot, The Hague).

Note: the beats of the 12/8 meter are here divided into two times 3/16 instead of three eighth notes.

Regarding conventions notating in 4/4 would be better, but then you would have to notate triplets all the time.

- Bootleg copies of the demo: Ned the mumbler. The third series of "Beat the boots" legalized a number of historical recordings, like this title and the next, though still with the original bootleg quality. Below a screenshot from amazon.com.

Toad of the short forest - Arabesque

- Weasels ripped my flesh/Bootleg copies of the demo: Ned has a brainstorm, including the opening theme from Toad of the short forest. The basic melody of this song on the demo is about the same as on "Weasels ripped my flesh". The accompaniment on the latter is richer and "Weasels ripped my flesh" has two introductory bars with three parts prescribed. For the other bars Zappa probably indicated bass pedal notes and chord types.

This opening melody is in 6/8. It starts with 7 bars maintaining the key of A. That is Zappa (and also Wolfgang Ludwig) notated this song in A, taking the first Amaj7 chord as decisive. Zappa didn't write out all the details and a G, altered to natural, turns up first in his bar 3. The "Weasels ripped my flesh" version, however, has an additional intro of four bars using a G natural only. So Brett Clement (in his response to me) has a good argument for saying that at least this last version is better identified as A Mixolydian. Next the melody begins to shift through various scales rapidly, till the opening returns in bar 13. On "Weasels ripped my flesh" this melodic opening gets followed by a polyrhythmic section, with Zappa himself explaining what's going on. The rhythm section is using two meters simultaneously, whereas an improvising sax is "blowing its nose". See the counterpoint #2 section for transcribed examples in this study of such polyrhythms like "9/8 objects".

JAZZ COLLECTION
#7.
FRANK ZAPPA

ARABESQUE

PIANO LEAD SHEET
11/21/63

MODERATE ♩. = 63

Amaj7 Dmaj7 Em7 A4 Amaj7 Gnat7

Arabesque/Toad of the short forest, opening bars (original score)

Handwritten musical score for 'Toad of the short forest, opening'. The score is arranged in three systems, each with three staves. The first system starts at measure 5, the second at measure 18, and the third at measure 12. The music features a mix of treble and bass clefs, with various rhythmic patterns including triplets and sixteenth notes. The key signature is G major (one sharp).

Toad of the short forest, opening. Transcription: KS (basic theme by Wolfgang Ludwig, 1992, see below). (update 2008, deposited at the I-depot, The Hague).

Handwritten musical score for '8 Takte Vorspiel 9'. The score is in a single system with four staves. It begins with a treble clef and a key signature of G major. The first staff is labeled '8 Takte Vorspiel 9'. The second staff has measure numbers 15 and 19. The third staff has measure numbers 22 and 24. The fourth staff has measure number 30 and the instruction 'vstw.'.

(End of theme 1 is blanked, being no part of this example.
To the right theme 2 starts.)

Arabesque/Toad of the short forest, theme 2 (original score).

In 2016 I found a copy of Zappa's own handwritten score of "Toad of the short forest" on the net. It was sent in by Zappa as part of a jazz collection set. It's his seventh piece for this set. The composition is dated as 21 November 1963 and at that time it carried the title "Arabesque". Zappa himself notated this piece in 3/4, corresponding with one time 3/8 in my transcription from above. The tempo is described as moderate with the metronome tempo included (63 dotted half notes per minute). Other than theme 1, theme 2 has a very straightforward 3/4 rhythm. A thing that's remarkable is the rich chords of theme 2, going up to 13th chords. There are a couple of examples in this study that show that Zappa's harmonies, when he originally put them on paper, are much denser than when the band recorded them for their first album release. In the Uncle Meat section I've included an overview of version differences between sheet music and album releases, as they are coming by in this study.

Though only the opening of "Arabesque" is in A, you can see that Zappa notated the whole piece in this key. Because the chords for theme 2 are so large, one can start identifying scales-chords per bar more easily:

Bars 1-3 (of theme 2): E Dorian.

Bar 4: Step IV of E Dorian, while the harmony is using a minor 9th (the B altered to Bb).

Bar 5: Step I of E Dorian again.

Bar 6: G Mixolydian.

Bar 7: F# Mixolydian.

Bar 8: Just the Em7 chord, at this point not attributable to one specific scale.

Bar 9: D Dorian.

Bar 10: Step IV of D Dorian, while the harmony is using a minor 9th (the A altered to Ab).

Bar 11: C Dorian.

Bar 12: Step IV of C Dorian, while the harmony is using a minor 9th (the G altered to Gb).

Bar 13: E Mixolydian, while the harmony is using a minor 9th (the F# altered to F).

Bar 14: G Mixolydian, while the harmony is using a minor 9th (the A altered to Ab).

As you can directly see, the 13th chord with a minor 9th returns a couple of times, as well as the sequence I-IV in Dorian using this chord on step IV. Theme 2 corresponds with 0:43-1:00 on "Weasels ripped my flesh". On this CD the melody gets accompanied in the manner of the first example from above, instead of using the large chords from the score. While the score prescribes this theme to be followed by a coda, the CD version moves over to the experimental part abruptly.

- Mystery disc: Charva. Announced in the Uncle Frankie show as a song to be included.

CAPTAIN BEEFHEART VS. THE GRUNT PEOPLE

The next project became the shooting of a science fiction film called "Captain Beefheart vs. the Grunt People". The Captain Beefheart character from the little piece above (to be played by Don Van Vliet), went straight over into this movie, thus Zappa took the liberty to present it as a dialogue sample from this film on the "Mystery disc". There are some photos of backdrops Zappa painted on the cardboards he had bought, as the one to be found in the Real FZ book.

Duodenum

Handwritten musical score for "Duodenum". The score is written on five staves. The first system (measures 1-4) includes a vocal line (mf), a guitar line (p), a bass line (p), a double bass line (mf), and a drum line (mf). The second system (measures 5-8) includes a vocal line (mf), a guitar line (p), a bass line (p), a double bass line (mf), and a drum line (mf). The score contains handwritten annotations: "vague, by approx." under the guitar and bass lines in the first system; "others as bar 1" in the second system; "Bar 1 repeats" in the second system; and "As bar 4" in the second system. A box containing the number "1" is placed above the first measure of the first system.

The image shows a handwritten musical score for the piece "Duodenum, end." It consists of six staves. The top staff is in treble clef with a key signature of one sharp (F#) and a common time signature. It contains a melodic line starting with a circled '8' above the first measure. The second staff is in bass clef with a key signature of one sharp (F#) and a common time signature, containing a bass line with some rests. The third staff is also in bass clef with a key signature of one sharp (F#) and a common time signature, with the handwritten note "As bar 1" written above it. The fourth, fifth, and sixth staves are in bass clef with a key signature of one sharp (F#) and a common time signature, containing sparse notes and rests. To the right of the staves, there are handwritten annotations: "Bars 7-8 keep repeating" and "and fade out".

Duodenum, end. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

In an interview Zappa once mentioned that "Duodenum" - from the later "Lumpy gravy" album - was intended to be its main theme. The 2009 ZFT release "Lumpy money" indeed confirms that this piece stems from Studio Z. The text appears to have been fully typed out in 1969 as an unpublished 94 page script, of which a few copies circulate. See the following two sites for sample pages:

- <http://www.beefheart.com/zigzag/gruntpeople>
- <http://www.afka.net/Books/grunt.htm>

Above and below are the recapitulation of the opening theme at the end and a section from the middle of this song. This middle part has two brass parts playing against each other (staves 3 and 5), whereas in most of the song, everybody is playing mainly parallel. "Duodenum" starts in E Dorian (that is with the original speed as included on "Lumpy money" as the "Theme from Lumpy gravy" track). In bars 1-2 of the second example it has turned to E Phrygian, followed by bars 3-6, built around a C-D-E chord progression (three parallel major 5th chords). On "Lumpy money" "Duodenum" lasts 1:56. On "Lumpy gravy" it's sped up to 1:32, corresponding with the keynote going up from E to G.

It was this movie project that got him into trouble. An article about the movie appeared in a Pamona newspaper (photo to the right as reproduced in the "Joe's XMasage" leaflet) and a local officer of the law came to see Zappa's presence as a threat to the peace and quiet in his small town. A set up was constructed to arrest Zappa for producing pornographic material, at that time a minor felony in this state. Zappa got convicted to 10 days imprisonment and a year on probation. It was enough to halt his career in Cucamonga. When he was released he had no money and had to look for a regular job in L.A. Unable to pay the rent he got barred out from Studio Z. It got demolished some months later in order to broaden the main road.

Ova 1

mp

mp

P (vague)

mf

mf

Ova 4

#0

This is a handwritten musical score for a piece titled "Ova 1". The score is written on ten staves, organized into two systems of five staves each. The first system is marked "Ova 1" and the second system is marked "Ova 4". The music is in 4/4 time. The first system includes dynamic markings of *mp* (mezzo-piano) and *P (vague)* (piano, vague). The second system includes a dynamic marking of *mf* (mezzo-forte). The notation includes various rhythmic values, accidentals (sharps and naturals), and articulation marks. The score is a transcription of a section from "Duodenum".

Duodenum, section. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

Bossa Nova Pervertamento - GTR trio

The last song recorded in Studio Z was a trio jam, called "Bossa Nova Pervertamento". It must have lasted at least 13 minutes. The ZFT has released its opening on "Joe's XMasage" as the "GTR Trio", Zappa himself released a section on the "Mystery disc".

Handwritten musical score for the opening of "Bossa Nova Pervertamento". The score is written for Guitar, Bass, and Bass. The key signature is B-flat major (two flats) and the time signature is 4/4. The guitar part starts with a complex rhythmic figure. The bass part has a simple, repeating pattern. The score includes handwritten annotations: "Two times" above the bass line, "Keeps repeating alike" above the bass line, and "(Bass continues)" below the bass line. The score is divided into four systems of staves.

Bossa nova pervertamento/GTR Trio, opening. Transcription: KS.
Both sections: update 2007, deposited at the I-depot, The Hague.

Handwritten musical score for a section of "Bossa Nova Pervertamento". The score is written for Guitar, Bass, and Bass. The key signature is B-flat major (two flats) and the time signature is 4/4. The guitar part features complex, off-beat rhythmic figures with many accidentals. The bass part has a simple, repeating pattern. The score includes handwritten annotations: "L3-1" below the guitar line, "(Bass continues alike)" below the bass line, and "3" below the bass line. The score is divided into four systems of staves.

Bossa nova pervertamento, section. Transcription: KS.

These pieces don't overlap. At the beginning everybody is playing strictly over the bass riff, but after playing 11 minutes or more the solo is getting quite loose with off beat figures as in the second part below. On paper such figures look horrible. The harmony is untraditional. The bass riff is maintained all through

this piece with a progression of I 5th - VI 9th in G Phrygian. The lead guitar begins playing with an arpeggio chord, the I 11th chord. Its Ab-C tail is the two notes from the scale not used by the bass.

FORMATION OF THE MOTHERS

The image shows a handwritten musical score for the opening of 'Mondo Hollywood'. It is divided into three systems, each with a vocal line and a guitar/bass line.

- System 1:**
 - Vocal:** Starts with a rest, then has notes with lyrics "(Wah--)" and "(yayaya)".
 - Guitar:** Labeled "Guitar &vabassa->". It features arpeggiated chords and is annotated with "Repeats alike" and "Repeats alike".
 - Bass:** Labeled "Repeats" and "Asbar1".
- System 2:**
 - Guitar:** Labeled "Guitar &vabassa->". It continues with arpeggiated patterns, including triplets and a sixteenth-note triplet. Annotations include "6" and "3-1".
 - Bass:** Labeled "Asbar3" and "Keeps repeating alike".
- System 3:**
 - Vocal:** Starts with a rest, then has notes with lyrics "(Oh my--)" and "(x)".
 - Guitar:** Labeled "Guitar". It features arpeggiated chords and is annotated with "(Bass continues)".
 - Bass:** Labeled "Woow-". It features arpeggiated chords and is annotated with "(x)" and "3".

Mondo Hollywood, opening. Transcription: KS (update 2007, deposited at the I-depot, The Hague).

In L.A. Zappa got called by Ray Collins to join a band called The Soul Giants. This band included Roy Estrada on bass and Jimmy Carl Black on drums. It became Zappa's next project to lead this band to a record contract for playing his music instead of covers. It took a year but this one did become a success. He renamed the band to The Mothers, later on with "Of Invention" added to it because MGM records required this. With MGM a deal was made to release five records, to start with "Freak out!". Recordings from 1965 prior to the "Freak out!" sessions in March 1966 are rare. Zappa himself has released some tracks on the "Mystery disc", taken over from tapes in a poor condition. The demos the ZFT included on

"Joe's Corsage" and "MOFO" are of a relatively good quality, but these have as disadvantage that they go about the same as on the later album recordings.

Mondo Hollywood

On the previous page is a section from the Mothers' guest appearance in the Mondo Hollywood movie, filmed in the summer of 1965. Because too much crowd noise went into the mikes, the director, according to his own saying, could only use a split second for the movie showing the Mothers on stage and none of the music. The track on the "Mystery disc" stems from Zappa's own tape archive, containing a guitar solo in E Dorian over a bass riff.

Motherly love

The Joe-series stemmed from an idea by Gail Zappa to release a number of obscurities from the tape vault in CD format. As music CDs these issues are better to be avoided. Many tracks have a demo status at best and their inferior sound quality can be disturbing. They collide with the effort Zappa took in constructing his own official albums. As archive material, however, they can be of value. "Joe's Xmasage" and "Joe's Corsage" help with filling in the year 1965, just because there is so little else.

The first example from below is the opening from the 1965 demo version of "Motherly love". As such it was meant to be listened to by Zappa himself and the sound quality is reasonable. It contains most of theme 1, beginning with a I-VII chord alternation in A Mixolydian. During bars 1-4 it's a chord per bar, while in bars 5-6 this is getting accelerated to two chords per bar. Bars 7-10 continue with an F#m-E progression. Not included in the example are the two bars with the instrumental tail of theme 1, with an E-G-F-E progression. It's a parallel movement of major thirds, not belonging to one specific key. The second theme from this song is sung over a riff in A Dorian. Bars 1-2 of the second example from above contain this riff. Bars 3-4 are the coda of theme 2, gently modulating back to A Mixolydian. Bars 5-6 are theme 1 again. As you can see there are little differences between the 1965 and 1966 execution. It's mostly the details of how the chords are played. In 1965 it's mostly done as broken chords. It's being played by two guitars in the same corner of the stereo field, so I can't distinguish between them (I'm only using two staves for easing the notation). It's not bright enough to be positive about all details too, some elements in the transcription being only by approximation. In 1966 the chords are more played as sustained chords with an additional part for the vibes. In both performances there can be additional passing notes being added to the chords, like the E in bar 6 of the second example. The demo of "I ain't got no heart" is the only demo track with a substantial difference. It has an instrumental intro, that got skipped during the 1966 recording. In order to survive the band had to play covers too. The three live tracks on "Joe's Corsage" do little more than corroborate this fact, because their sound quality is sub-standard. Other examples can be found on the semi-official "Tis the season to be jelly" bootleg from 1967, also with a lesser sound quality. In 1968 the reputation of the band was good enough to play a cover for pleasure only.

1

Vocals

What you need is —, motherly love —,

As bar 2

Guitars

Bass

2

Vocals

For- get-

As bar 2

Guitars

Bass

3

Vocals

As bar 2

Guitars

Bass

Motherly love (1965), opening. Transcription: KS (update Fall 2017, deposited at the I-depot, The Hague).

Vocal
 mf No need to feel lone-ly, no need to feel sad - if we e-ver get a hold on you - What you need is -

Vibes

Guitars
 mp

Bass
 mf pp

Vocal
 mother-ly Love - , come on, get it now -

Vibes

Guitars
 mf

Bass
 mf pp

Motherly love (1966), opening. Transcription: KS (update Fall 2017, deposited at the I-depot, The Hague).

Other tracks from The mystery disc

The "The mystery disc" is also the main source for the Movie scores section from this study. See the other tracks from The mystery disc from the latter section for an overview.

First line-up of The Mothers Of Invention (1965-1968)

Zappa continued to play in bands and took the lead of the Soul Giants, in 1965 re-baptized as The Mothers Of Invention. *Freak out!*, their first album, got released in 1966 as one of the first double albums in rock history. With *Absolutely free* from 1967 Zappa could demonstrate what he was capable of as a composer. *Brown shoes don't make it* is famous for bringing together a multitude of styles, using varying meters and rhythms, as well as an atonal interlude. The sudden rise of the hippie movement incited Zappa to compile *We're only in it for the money*, a social commentary. No two sequent Zappa albums are more different from each other than *Cruising with Ruben and the Jets* and *Lumpy Gravy*. The first a tribute to the doo-wop genre from the fifties, the second a bizarre collage.

FREAK OUT! - FILLMORE WEST, 1966: INTO THE ROCK INDUSTRY

FREAK OUT!

In 1965 Zappa took the lead of a band called "The Soul Agents", which ultimately led to the first album "Freak out!" by this group, now renamed as "The Mothers of Invention". It got recorded in 1966, preceded by demos recorded the year before. "Freak out!" can be divided in two sections. The first part, sides 1 and 2 of the original double album, contains uncomplicated pop songs, at least for Zappa standards. As a debut album it had to reach for a public after all. The album didn't include a hit single, nor was it a hit itself. It remained low in the charts over a longer period though, thus Zappa was able to build up an audience and achieve some cult status. The second part, sides 3 and 4, is the experimental section, with improvised vocal parts. With this part Zappa addressed himself to the Los Angeles freak scene, the group of young people in the city, that stood for an unconventional way of life. Compared to the Cucamonga singles the songs have gained in strength, but they remain relatively easy compared to the Zappa compositions to come. In 1974, when celebrating the 10th anniversary of the Mothers of Invention, Zappa put the songs of the album on the menu for a gig at Chicago's Auditorium Theatre and commented in an interview how easy these songs were compared to what the band had been doing recently. Nevertheless the album was conceived of as being controversial, maybe also because of the explicit cynicism of the lyrics. The packaging, a double album with two experimental sides, was definitely unusual in 1966. So where the colour effects and letter types on the album cover. Zappa negotiated the album to be sold for the price of a single record, when he in return would decline the royalties over the second disc. To the left: section from the *Freak out!* album cover with bass player Roy Estrada. Roy was a steady member during the sixties and returned working with Zappa in the years 1976-7 (*Zoot allures*, *FZ:OZ* and *Baby snakes*, the movie).

1. Hungry freaks, daddy

"Freak out!" opens with three rather sharp songs, stylistically as well as regarding the content of the lyrics. The set-up of the album opener "Hungry freaks, daddy" goes as follows:

First block.

- 0:00 Instrumental opening lick of two bars with a bass riff and a chords progression. This progression is a parallel movement of three major triads: A-C-D. From the beginning Zappa has approached diatonic music as modal, where he can swiftly move through a number of scales and mingle closely related scales as it suits him. In this case the A and C chord are treated as equally important and since they don't belong to the same scale, they cause a modulation. The opening lick begins in A Mixolydian, next it moves over to C major pentatonic, after which the music returns to A Mixolydian via step IV. Over the C pedal part both the F/F# and B/Bb are avoided, also during the solo halfway, turning it into a pentatonic use of a major type of scale. There is a chromatic Gb present in the guitar part, however, as a passing-through note

towards A (G-Gb-A).

- 0:14 Theme I with the opening lick continuing ("Mr. America, walk on by ...").

- 0:27 Theme II with a chord progression over an E pedal by the bass ("Mr. America, try to hide ..."). This progression is D-E-Em. So at first another parallel movement of two major triads, followed by a switch to a minor triad. Again this causes a modulation, this time from E Mixolydian to E minor/Aeolian. The D and E chords fit in as steps VII-I of E Mixolydian (each for one bar), but the Em chord, played during two bars, can only be interpreted as a modulation.

- 0:34 Theme I again.

- 0:44 A new ending for theme I, with the chord progression C#m-Bm-E-Bm. It's used in case there's a transition to theme III.

- 0:51 Theme III, made up of a couple of phrases ("They won't go(-oh) for no more ...").

a) 0:51 Phrase a with the C#m and Bm chords continuing. The bass pedal plays a little lick with C#-G#-C#-B-F#. The set of notes remains the same.

b) 0:57 Phrase b as a variant upon phrase a. This one is using the D and C#m chords, with the bass lick being D-A-D-C#-G#.

c) 1:04 Phrase c with the progression Bm-F#m.

d) 1:10 Phrase d with the progression E-D-E-F#m-E, played twice.

The whole period from 0:44 through 1:10 is using the same set of notes, but without an overall key note. It begins on B as if being in B Dorian and ends on E as if being in E Mixolydian.

Second block.

- 1:17 This is a repetition of all of the chords and bass lines of block 1 as an instrumental interlude with a guitar solo. It's very common to play an interlude or a bridge in this manner in pop-music, but Zappa seldom recorded guitar solos in that manner. See the Shut up 'n play yer guitar and Guitar sections for his standards for playing guitar solos. During the Freak out! recording sessions the band got supplemented by session musicians, including cellos and brass, making it difficult to identify who's playing which part. The mothers themselves get credited for their regular instruments.

I've transcribed the example below by combining the basic tracks and complete versions from "MOFO" and "Freak out!" (see below for "MOFO"). This way you can hear three guitar parts. Both Zappa and Elliot Ingber are credited for playing lead and rhythm guitar, so also here I can't tell who's playing what. The example starts with the last repetition of the lick of theme I and continues with the four bars that form theme II.

Third block.

- 2:20 Second repetition of block 1, this time with the lyrics returning without changes.

- 3:21 The last note from theme III being held with a few solo notes as the song's ending, added during the second take. On the basic tracks from "MOFO", the band fades out at 3:21.

- 3:27 End.

1

Guitars

Vib.

Piano

Bass

4

Guitars

Vib.

Piano

Bass

Previous page: Hungry freaks, daddy, section. Transcription: KS (update May 2016, deposited at the I-depot, The Hague).

2. I ain't got no heart

Handwritten musical score for the piece "I ain't got no heart". The score is written on ten staves, organized into two systems of five staves each. The key signature is one flat (Bb) and the time signature is 4/4. The lyrics are written in the vocal line.

The first system includes the following lyrics: "Ain't got no heart. I ain't...". The second system includes the following lyrics: "I sit...".

Performance instructions include "Two times" written above the second staff of the first system, and "Three times likewise" written above the second staff of the second system. The name "Bvabassa" is written at the beginning of the first and last staves.

Previous page: I ain't got no heart, opening, transcription: KS (3rd printed edition; main melody by Wolfgang Ludwig, 1992).

This second note example is part of "I ain't got no heart", the second song on "Freak out". The harmony for the first theme is I, II, III and II in G Dorian. For the second theme it goes as IV from G Dorian (with an extra A as a passing-through note), moving through V of G to IV of B Dorian.

As pop music chords it can be identified far more easily, namely as a C, D, E progression. Thus a sequence of three major triads. Then it goes back again to G Dorian. The sung melody isn't difficult, but the instrumental passages as in bar 4 and 8 add flavour to the song. The lyrics include "I sit and laugh at fools in love, there ain't no such thing as love, no angels singing high above today".

3. Who are the brain police?

"Who are the brain police?" has a gentle main theme, but gets interrupted by an ugly noisy interlude, stressing the hostility of its lyrics. Perhaps this is Zappa's most direct effort at social criticism. In 1970 "Who are the brain police?" returned on the setlist, but with entirely newly written music (see the Fillmore East 1970 and Carnegie hall sections for examples). The lyrics were kept the same.

1

A musical score for the song "Who are the brain police?". The score is written in 3/4 time and consists of five staves. The first staff is a bass clef with a key signature of one sharp (F#). The second staff is a bass clef with a key signature of one sharp (F#). The third staff is a treble clef with a key signature of one sharp (F#). The fourth staff is a bass clef with a key signature of one sharp (F#). The fifth staff is a bass clef with a key signature of one sharp (F#). The score begins with a rest in the first staff, followed by a whole note chord of F# in the second staff. The third staff has a melody starting with a quarter note G, followed by a quarter note A, and a quarter note B. The fourth staff has a melody starting with a quarter note G, followed by a quarter note A, and a quarter note B. The fifth staff has a melody starting with a quarter note G, followed by a quarter note A, and a quarter note B. The score ends with a double bar line.

6

Musical score for measures 6-10. The score consists of five staves. The top staff is a bass clef with a key signature of one sharp (F#). The second staff is a bass clef. The third staff is a treble clef. The fourth staff is a bass clef. The fifth staff is a bass clef. The lyrics "What - will - you ..." are written under the third staff in measure 7. The music features a mix of whole, half, and quarter notes, with some chords and rests.

11

Musical score for measures 11-14. The score consists of five staves. The top staff is a bass clef with a key signature of one sharp (F#). The second staff is a treble clef. The third staff is a bass clef. The fourth staff is a bass clef. The music features a mix of whole, half, and quarter notes, with some chords and rests. A slur is present over the top staff in measures 12 and 13.

15

Musical score for measures 15-18. The score consists of five staves. The top staff is a bass clef with a key signature of one sharp (F#). The second staff is a treble clef. The third staff is a treble clef. The fourth staff is a bass clef. The fifth staff is a bass clef. The music features a mix of whole, half, and quarter notes, with some chords and rests.

19

Who are the brain police?, section. Transcription: KS (update Spring 2018, deposited at the I-depot, The Hague).

Nominally "Who are the brain police?" is in G. It's a recurring feature in Zappa's music that he can play chord types parallel.

- bars 10-12 and 16-18: bass pedal G plus D as chord (or Gmaj9 for the total).
- bars 13-15: bass pedal A plus E as chord.
- bars 19-21: bass pedal F plus C as chord.

By doing so you're soon getting at notes getting altered, like the G becoming sharp during bars 13-15. One could call that an incidentally altered note, still interpreting it as step II plus V from G major. Since both the bass figures and the chord are getting transposed, there's also a valid argument to call these chord changes key changes. Thus a sequence of G major, A major, G major and F major. The G also appears as sharp in bar 3 of the first half of the main theme. During bars 1-9 Zappa maintains the bass pedal G as natural, causing a dissonance in bar 3. Bar 22 is the first bar of the intermezzo with people screaming, feedback guitar notes and innuendo-like voices saying "I think you're going to die". It's not really fit for transcribing or to put in a midi file. Other instances of parallel chords in this study are for example "The idiot bastard son" (YCDTOSA vol. II section, parallel sus2 chords) and "Son of Suzy Creamcheese" (next section, minor chords).

4. Go cry on somebody else's shoulder

After tracks 1-3 the album becomes friendlier. "Go cry on somebody else's shoulder" is a conventional love song. On page 169 of his study (see the literature list), W. Ludwig describes this song as a doo-wop parody: "At the start people are reciting introductory words over a four-bar cadence, I-VI-IV-V. The singing, following upon it, involves five voices. Two tenors are singing the lyrics, accompanied by one bass (Frank Zappa) and two falsettos. These two falsetto voices are only singing vocals in a more and more exaggerated way, parodying the doo-wop singing of vocal harmony groups." Ludwig doesn't mention the key of this opening: it's in G.

5. Motherly love

The CD booklet contains little descriptions of each track by Zappa himself. "Motherly love" is making fun of motherly care in a harmless way that can only make you laugh. See the previous section for examples from the 1965 demo recording and the final version from "Freak out!".

The scores of most tracks from "Freak out!" have at some time been available to the public and copies still must be lying in the closets of the ZFT archives. During the first decade of this century, the ZFT used the company name Barfko Swill for - among others - selling scores. There used to be a Freak out collection in their catalogue, including the following titles:

- Hungry freaks, daddy.
- I ain't got no heart.
- Who are the brain police?
- Go cry on somebody else's shoulder.
- Motherly love.
- Wowie zowie.
- Any way the wind blows.
- I'm not satisfied.
- You're probably wondering why I'm here.

During recent years this collection is not shown anymore individually in their site, but one could try to contact the ZFT for getting a copy.

6. How could I be such a fool (1966)

In 1973 Zappa had a "Frank Zappa Songbook Vol. I" published. It covers the years 1966-69 and is an excellent source for this period. "How could I be such a fool" is present in a piano arrangement with guitar tabs added to it (pages 45-51), next to "I'm not satisfied" (pages 75-81). The first song starts gently in C, but soon continues modulating. It's made up of three themes. Theme one is constructed as a little sequence with the bass line descending, of which I'm including the opening bars as a sample. The meter of this song is 3/4 all through.

Very briefly the thematic construction goes as:

- Bars 1-4: instrumental intro with the C-chord.
- Bars 5-20: theme 1 (When I won your love ...).

Theme one knows four phrases of four bars. In the example above you can see that phrase two is basically a transposition of phrase one, going a major second downwards from C major to Bb major. This happens again for phrase three. Phrase four has a chord progression of its own. At this point there is no entire scale being used, but this is the case during the repetition of theme one (an additional F for phrase one and an Eb for phrase two).

- Bars 21-36: theme 2 (I know now that you never ever really loved me ...).
- Bars 37-56: theme 3, the main theme/chorus (How could I be such a fool ...).
- Bars 57-72: theme 1 (There will come a time ...).
- Bars 73-77: the opening bars from theme 3 are now used to form a coda, ending in E Dorian.

The main theme from "How could I be such a fool (1968)" gets dealt with in detail in the Cruising with Ruben and the Jets section from this study, where it gets compared with the doo-wop version on the latter album.

C

Em

When I won your love, I was ver - y glad, Ev - 'ry

Bb

Dm

hap - pi - ness in the world be - longed to me.

How could I be such a fool, bars 5-12 (the meter is 3/4). Source: The Frank Zappa songbook vol. I.

7. Wowie Zowie

"Wowie Zowie" is the easiest song on the album, about which Zappa is saying: "[it] is carefully designed to suck the 12 year old listener in our camp [...]. It is cheerful. It is harmless." The song's title, "Wowie Zowie", appears to have been a favorite line by Pamela Zarubica. Pamela worked as a secretary at the Whiskey a go-go and shared a house with Frank for a while, before he met Gail. She belonged to the inner circle of the Mothers, the first on the list of contributors from the album's inner sleeve. The song ends with referring to the The four seasons' hit "Sherry".

8. You didn't try to call me

Later in his career Zappa would take a stand against love songs. "How could I be such a fool" and "You didn't try to call me" can be called classical broken hearts songs of an excellent quality. Though such songs don't abound in Zappa's catalogue, they return every once in a while. "You didn't try to call me" got recorded again for the doo-wop collection of the later "Cruising with Ruben and the Jets" album, where I've included three examples from this song in the versions from 1966, 1968 and 1976. To the right: Joe Travers holding the original Freak out! album reel as preserved in The vault (situation in 2000, documentary by Frank Scheffer, VPRO television).

9. Any way the wind blows

Zappa recorded "Any way the wind blows" first in 1963. The opening of this specific version is included in the Paul Buff section. It's another song from "Freak out!" that would return on "Cruising with Ruben and the Jets" in a doo-wop setting. The lyrics are referring to the ending of his first marriage, about which he writes in the biographical trivia from the album notes: "Got married when I was 20 ... a lovely girl: almost ruined her life, filed for divorce, moved into my recording studio [etc.]."

10. I'm not satisfied

As mentioned above, the score of "I'm not satisfied" got published in the Frank Zappa songbook vol. I. At the end of this songbook, Ian Underwood gets credited for doing the piano arrangements (except for "Little house"). Zappa himself had probably notated a song as "I'm not satisfied" by its lead melody with the chords indicated by their symbols. See for instance the "Toad of the short forest" example in this study. Ian combined this with how the band played these pieces when he was in the band, as well as filling it in specifically for a piano. None of these scores and arrangements are literally played like that on Zappa's albums. The reasons are that Zappa always could change things on the spot and the element of improvisation. So you've got version differences all the time. Below is a literal reproduction of bars 1-12 as how they are played on "Freak out!", next to bars 5-11 from the Songbook.

The image displays two systems of handwritten musical notation. The first system, for "Any way the wind blows", includes staves for Vocals, Guitars, and Bass. The second system, for "I'm not satisfied", includes staves for Vocals, Keyb (Keyboard), Guitars, and Bass. The notation is handwritten and includes various musical symbols such as clefs, time signatures, notes, rests, and dynamic markings like "p" and "p(faint)".

System 1: Any way the wind blows

- Vocals:** Starts with a treble clef, key signature of two sharps (F# and C#), and a 4/4 time signature. The lyrics "nt Yeah" are written below the staff.
- Guitars:** Treble clef, two sharps key signature, 4/4 time signature. Includes a "tr" (trill) marking and a "Asbar 1" annotation.
- Bass:** Bass clef, two sharps key signature, 4/4 time signature.

System 2: I'm not satisfied

- Vocals:** Treble clef, two sharps key signature, 4/4 time signature. Lyrics include "Got," and "no place to go".
- Keyb:** Treble clef, two sharps key signature, 4/4 time signature. Includes a "p(faint)" dynamic marking.
- Guitars:** Treble clef, two sharps key signature, 4/4 time signature. Includes a "3" (triplets) marking and a "p(faint)" dynamic marking.
- Bass:** Bass clef, two sharps key signature, 4/4 time signature.

Handwritten musical score for the opening of "I'm Not Satisfied". The score is written on four staves. The top staff is a bass clef with a treble clef sign above it. The second staff is a treble clef with a "bva" (basso continuo) marking. The third and fourth staves are also treble clefs. The music is in a key with one sharp (F#) and a 3/4 time signature. The notation includes various rhythmic values, accidentals, and articulation marks.

I'm not satisfied, opening. Transcription: KS, where the basis could be taken over from the Songbook (update spring 2017, deposited at the I-depot, The Hague).

Piano accompaniment for the opening of "I'm Not Satisfied". The score is written on three staves: a single treble clef staff at the top and a grand staff (treble and bass clefs) below. Above the top staff are guitar chord diagrams for C#m7, D, and E, repeated. The piano accompaniment features a steady bass line and chords in the right hand.

Vocal and piano accompaniment for the first line of "I'm Not Satisfied". The score is written on three staves: a single treble clef staff at the top for the vocal line, and a grand staff (treble and bass clefs) below for the piano accompaniment. Above the vocal staff are guitar chord diagrams for D, A, Am7, D7, and Am7. The lyrics are: "Got no place to go, I'm tired of walk-
-gua".

Previous page: I'm not satisfied, bars 5-11. Source: The FZ Songbook vol. I (meter is 4/4).

As you can see, the songbook version is a piano arrangement with guitar tabs. The execution on "Freak out!" has the same basis, but on a detail level there are many differences. Just to mention some:

- bar 4: the guitar improvises some notes along the indicated chord.
- bars 9-10: the sung melody goes a bit differently and this melody is performed by two vocalists, using different notes.
- bar 9: the guitar plays a Dsus2 chord instead of D (as a triad).
- bars 10-12: in the background you can hear a keyboard playing improvised notes in a high register.

The song begins with a little instrumental intro in E Mixolydian with the chord progression C#m7-D-E. Next you've got the first theme, made up of two phrases. The first, with "got no place to go", is in D. The second phrase modulates to A Dorian. Only the first two bars, with "I'm tired of walking up and down ...", are included above. In total it's a phrase of four bars. A different version can be heard on "Cruising with Ruben and the Jets". On this album, with its deliberate simplicity, this second phrase got skipped. In the Songbook the whole piece gets notated as in E Mixolydian. In my study I'm always following the modulations in my notation (the preset sharps and flats). This is a matter of choice.

The general structure of the entire song goes as:

- 0:00 Intro.
- 0:15 Theme 1. See above.
- 0:26 Theme 1 gets repeated.
- 0:36 Theme 2 ("Why should I pretend ...") with an F#m-E chord alternation in F# minor.
- 0:51 Theme 3/chorus ("I'm not satisfied ...") in B Dorian. It has a phrase that gets repeated three times. The end, with "Life has been abusing me", is a variation upon this phrase in D Dorian.
- 1:05 The intro returns. This time you can hear more instruments being involved. While the example from above is mostly the Mothers as a five member band, this time you can hear people from "Mothers' auxiliary" playing. The recording budget allowed Zappa to use a number of session players.
- 1:19 Themes 1-3 return with more session players contributing.
- 2:10 The intro once more.
- 2:17 Instrumental variation upon theme 3.
- 2:38 End.

11. You're probably wondering why I'm here

"You're probably wondering why I'm here" is an early example of a song where Zappa demonstrates his capacity of writing long melodies, which he would later on do more often in for instance "Florentine Pogen". The whole melody lasts a minute with only some of the bars repeated.

The melody is made up of several sections; you might also call it a multi-theme song with various shorter melodies. In the transcription the sections go as:

- Bars 1-4: The song starts in G. The harmonies form a series of regular 5th chords, I-IV-I-VII-VI-V. Rhythmically most of the piece is in plain on beat 4/4, which is for pop music normal, but for Zappa standards it's unusually static to do so over a longer period.
- Bars 5-11: Instrumental interlude with a funny quack sound. A gimmick in Zappa's music that would keep returning, just as the snorks. Bar 11 contains deviant harmonies.
- Bars 12-19: Phrase of two bars in E Mixolydian. Unlike the previous bars, this phrase gets repeated a couple of times.
- Bars 20-21: Section with a chromatic movement. The 6/4 bar causes a short break before a new melody sets in in bar 23.
- Bar 23 till the end of the theme. A larger closing melody, of which only the first two bars are included in the transcription.

2

You're

Chords: G C G G F F F Em Em Em D D D

am I.

All play parallel

6

(parallels continue)

D D Am Am

10

D D D D D A D2 D2 E D A G

Just as---

Bars 12-13 Repeat twice alike

18

Bar 12 repeats alike

A G F#m F#m Ab G F#m F#m Ab

23

A A G G Bm Bm A A

You're probably wondering why I'm here, opening. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

12. Trouble every day

The image displays a handwritten musical score for the section 'Trouble every day'. The score is organized into three systems, each with four staves. The key signature is one sharp (F#) and the time signature is 4/4. The instruments are identified as Guitar, Harmonica, and Bass.

- System 1:**
 - Guitar:** Labeled 'Well, I'm about...'. It features a melodic line with a triplet of eighth notes in the second measure and a '3' below it. The first two bars are marked 'First two bars keep repeating'.
 - Harmonica:** Shows a few notes in the first two bars, with rests in the subsequent two bars.
 - Bass:** Labeled 'Keeps repeating', showing a rhythmic pattern of eighth notes.
- System 2:**
 - Guitar:** Continues the melodic line with eighth notes.
 - Harmonica:** Shows a few notes in the first two bars, with rests in the subsequent two bars.
 - Bass:** Labeled 'Keeps repeating', showing a rhythmic pattern of eighth notes.
- System 3:**
 - Guitar:** Continues the melodic line with eighth notes, including a triplet of eighth notes in the second measure and a '3' below it.
 - Harmonica:** Shows a few notes in the first two bars, with rests in the subsequent two bars.
 - Bass:** Labeled 'Repeats As at the beginning', showing a rhythmic pattern of eighth notes.

Trouble every day, section. Transcription: KS (update 2006, 3rd printed edition 2007).

"Trouble every day" was written in 1965 as a reaction upon the Watts riots in L.A. Here it's played over a bass and guitar vamp in E Dorian. The bass vamp lasts one bar, while the guitar riff lasts two bars. A harmonica is improvising along with it. Bars 9-12 constitute a side theme, that returns every now and then to break the pattern of the returning vamp. Harmonically the bass follows a I-IV-V progression here (I for the vamp and IV-V for the side theme).

Zappa is here singing in a manner that much later would become known as rap. He would return to this song in 1974 in a very different version on "Roxy and elsewhere", in the shape of "More trouble every day". The lyrics got re-used, but the music is newly composed.

13. Help, I'm a rock

"Trouble every day" is followed by the experimental part of "Freak out!". "Help, I'm a rock" is built around various riffs and drum patterns. On the vinyl album it appears to have had two movements with a separation between them.

The example below opens with its main "Help, I'm a rock" motif, whereupon in bar 17 it is followed by improvised lyrics with fantasy texts. It's in 3/4 using the uncommon Phrygian scale. This scale begins with a minor second, in this case the A-Bb movement by the bass.

[1]

Help, I'm a rock. Help etc.
pp p

mf Two times

Keeps Repeating

Keeps Repeating

Keeps Repeating

[7]

Ha ha...

Four times

Asbar 1 Asbar 2

Keeps Repeating

[Drumset continues)

[17]

(Waya---)

(Seebee-)

Help I'm a rock, opening. Transcription: KS (update 2007, deposited at the I-depot, The Hague).
Drumset notation (bottom up): bass drum, snare drum, woodblock, hi-hat closed.

14. It can't happen here

A musical score for the song "It can't happen here". The score is arranged in four staves. The top staff is the vocal line, with lyrics "It - can't - hap - pen here" and "It - can't - hap - pen - here". The second staff is the piano accompaniment, with dynamics markings "mp" and "mf". The third and fourth staves are the bass and tenor parts, also with dynamics markings "mf" and "mp". The score includes various musical notations such as triplets, slurs, and dynamic markings.

It can't happen here, opening. The meters are my notational choice. This transcription and the one below: KS (update fall 2019, deposited at the I-depot, The Hague).

A handwritten musical score for piano and drums. The score is arranged in two systems. The first system consists of three staves: the top two are for piano (right and left hands) and the bottom is for drums. The second system consists of two staves: the top is for piano (right and left hands) and the bottom is for drums. The piano part includes various musical notations such as slurs, triplets, and dynamic markings. The drum part includes notation for bass drum/toms, snare drum, and cymbal, with 'x' marks indicating cymbal hits.

It can't happen here, bars from the piano-drums part.
Drumset notation (bottom up): bass drum/toms, snare drum, cymbal.

The largely vocals only song "It can't happen here" has a written lead sheet, along which the other singers

improvise. Between 1:09 and 1:54 there's an atonal instrumental jazz type of improvisation section. This lead sheet for "It can't happen here" used to be in the Barfko Swill catalogue, like the Freak out! collection not listed anymore. Below are two fragments from this piece. The first are bars 1-5 from the opening. Here it's all a capella. Zappa sings the lead melody from staff 1. Harmony notes are supplied by 4 to 5 other vocalists. It's atonal with maybe some fragments with diatonic material. On the two "here" notes sustained dissonant chords are formed. The second example is a small outtake from the drums-piano part, being outspoken atonal. The set-up, a drummer ticking steady 16th notes on a cymbal, and a pianist improvising, is remindful of a jazz combo.

Tracks 13 and 14 are sometimes presented as one track, with "It can't happen here" being a third movement for "Help, I'm a rock". Though they sound as a one-time only experiment, Zappa performed both tracks live as well. His son Dweezil included "It can't happen here" in the setlist of his 2018 Zappa plays Zappa tour.

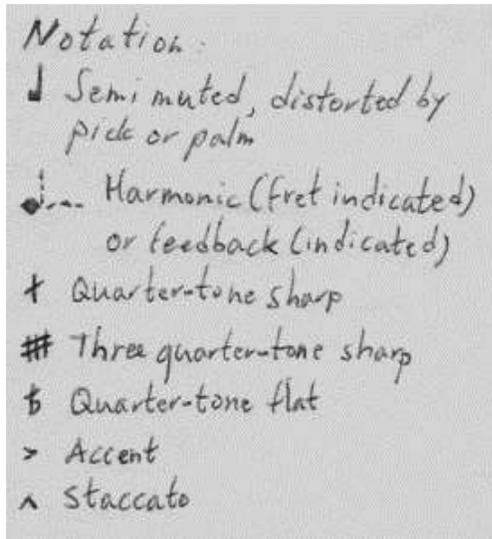
15. The return of the son of the monster magnet

For "The return of the son of the monster magnet" Zappa invited some 50 people from the L.A. freak scene to come to sing and play along with the Mothers for an evening session in the studio. He edited some 12 minutes from the event, whereas the ZFT released some more sections on "MOFO" 40 years later.

The image displays two fragments of handwritten musical notation. The top fragment, titled "Siren", consists of three staves. The first staff is a vocal line with a treble clef, starting with a dynamic marking of *mf* and a tempo marking of *to*. The second staff is a piano accompaniment with a treble clef, marked "NO METER" and featuring dynamics of *pp*, *mf*, and *pp*, along with the instruction "Arrh". The third staff is a drum part with a bass clef, marked *mf*. The bottom fragment consists of four staves. The first staff is a vocal line with a treble clef, marked *p*. The second staff is a piano accompaniment with a treble clef, marked *pp*, *mf*, and *pp*, with the instruction "Arrh". The third staff is a piano accompaniment with a treble clef, marked *mf* and *pp*, with the instruction "Arrh". The fourth staff is a drum part with a bass clef, marked *mf* and *pp*, with the instruction "Arrh".

The return of the son of the monster magnet, opening bars. Transcription: KS (update 2007, deposited at the I-depot, The Hague).

Drumset notation (bottom up): bass drum, snare drum, cymbal.



Like "Help, I'm a rock" this piece is also built around a number of riffs and drum patterns. It opens shortly without a meter with only a siren and somebody shouting. Next Jimmy Carl Black joins in and sets the meter to 4/8.

The album liner notes state that "Monster magnet" is made up of two movements. The original vinyl album seems to have had a separation between them to distinguish the tracks. In the Ludwig study the piece gets described in the table below. It's in German, but with translating devices on internet at hand, this is not a real problem anymore.

Pamela Zarubica and Jeannie Vasser alternatively played the role of Suzie Creamcheese. Jeannie is briefly audible at the beginning of this track. Pamela wrote the little message on the album sleeve. My example from above is the start of movement I (Ludwig groups two of my 4/8 bars into 4/4). The second movement starts at 8:10, called "Nullis pretii", Latin for "of no value" (referring to Zappa's "no commercial potential" line). It's the part that begins with people saying "America is wonderful".

The downtown talent scout

Historically the handful of live recordings on the 4 CD version of "MOFO" are of interest. They stem from a Fillmore West concert, 1966, from which Zappa himself released "The downtown talent scout" on YCDTOSA Vol. V, as well as "Plastic people" on "The mystery disc". It's the first more serious live recording that gives some idea how a Mothers concert would have been like in the early days. The other 1965-6 live tracks are individual songs, often with inferior sound quality. In this case the Mothers were the opening act for a Lenny Bruce concert. Zappa calls the hall Fillmore West. More accurately would be Fillmore Auditorium, the official name it had in 1966. The location became renamed as Fillmore West in 1969, to distinguish it from the just opened Fillmore East. By then it had moved as well (Ronald Light wrote me about this). Spread out over four different releases, you can find:

- YCDTOSA: "The downtown talent scout".
- The mystery disc: "Band introductions from the Fillmore West".
- The mystery disc: "Plastic people" (Richard Berry version).
- MOFO (2 CD): "Trouble every day".
- MOFO (4 CD): "Motherly love".
- MOFO (4 CD): "You didn't try to call me".
- MOFO (4 CD): "I'm not satisfied".
- MOFO (4 CD): "Hungry freaks, daddy".
- MOFO (4 CD): "Go cry on somebody else's shoulder".

Just as the demos on "Joe's corsage", these live versions don't differ much from the album versions. "The downtown talent scout" is a unique song in this group, not released elsewhere as well. It's an early easy going example of Zappa speech-wise singing over a vamp. This vamp is in A Dorian (bass pedal note) over which the chord alternation III-IV is played. It's a simple progression compared to later pieces as "Central scrutinizer". Zappa's singing follows the 4/4 meter here quite clearly, while in later songs he would often let the rhythm of the spoken language prevail. The lyrics stand central in this song and give a nice picture of the government spying on the L.A. freak scene. Ray Collins gets credited for playing tambourine, but actually plays harmonica.

Handwritten musical score for "The downtown talent scout, opening". The score is in G major (one sharp) and 4/4 time. It consists of three systems of staves. The first system shows the instrumental introduction with piano (p), piano-piano (pp), and mezzo-forte (mf) dynamics. The second system contains the first line of lyrics: "The kids are freak-ing out, e-very". The third system contains the second line of lyrics: "body is go-ing nuts, the heats out e-very night". The score includes various musical notations such as notes, rests, and dynamic markings.

The downtown talent scout, opening. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

ABSOLUTELY FREE: COMPLEXITIES

More than on his debut album Zappa could show his composing skills on the second album "Absolutely Free". Here we get to what Zappa would do quite often in his music, namely changing themes, meters, and tempi within a song. The album was recorded in a short time span, where the band could to a degree rely upon their experience playing parts live. At this point the band wasn't a reading band regarding sheet music, so pieces as "Brown shoes don't make it" had to be split up into sections, to be recorded separately. Next is a series of examples.

1. Plastic people

The album opener is "Plastic people", a song that exists in two versions. On stage he usually used Richard Berry's "Louie Louie" for the music with his own lyrics sung over it (see "Plastic people" and "Ruthy Ruthy" on YCDTOSA Vol. I, as well as on "The mystery disc"). "Louie Louie" is something everybody can follow, also when you don't know the original, because anyone recognizes the I-IV-V progression (in Mixolydian). He included it in his concert playlist for ten years. For the "Absolutely free" album version of 1967 however, he wrote his own music. The "Louie Louie" progression only gets quoted once, right at the beginning. In the two sections below we have meter and tempo changes as well as four themes.

The image displays a handwritten musical score for the song "Plastic People" by Frank Zappa. The score is written on a grand staff with five systems of staves. It features complex meter and tempo changes, as well as various musical notations and annotations.

System 1: Starts with a 4/4 time signature and "Tempo I". The first staff contains the vocal line with lyrics: "mf Take a day, and" and "You think we're--". The second staff contains a melodic line with a dynamic marking of "p" and the annotation "Five times alike". The third staff contains a bass line with a dynamic marking of "up" and the annotation "Repeats". The fourth staff contains a bass line with the annotation "Keeps repeating". The system ends with a measure marked with a circled "9".

System 2: Starts with a 6/8 time signature and "Tempo II (slower)". The first staff contains a vocal line with lyrics: "Keeps repeating" and "Repeats". The second staff contains a melodic line with the annotation "Repeats". The third staff contains a bass line with the annotation "Repeats". The system ends with a measure marked with a circled "13".

System 3: Continues the 6/8 time signature. The first staff contains a vocal line with lyrics: "Repeats" and "Repeats". The second staff contains a melodic line with the annotation "Repeats". The third staff contains a bass line with the annotation "Repeats". The system ends with a measure marked with a circled "13".

System 4: Continues the 6/8 time signature. The first staff contains a vocal line with lyrics: "Repeats" and "Repeats". The second staff contains a melodic line with the annotation "Repeats". The third staff contains a bass line with the annotation "Repeats". The system ends with a measure marked with a circled "13".

System 5: Continues the 6/8 time signature. The first staff contains a vocal line with lyrics: "Repeats" and "Repeats". The second staff contains a melodic line with the annotation "Repeats". The third staff contains a bass line with the annotation "Repeats". The system ends with a measure marked with a circled "13".

Plastic people, section. Transcription: KS (3rd printed edition, 2007).

The transcribed section contains:

- bars 1-8: main theme 4/4 in G Mixolydian. The chord progression is either I-VII or I-IV-VII.
- bars 9-12: intermediary theme in a slower tempo. The scales start to change, but there are no clear key notes in these bars. The progression in rock terms is B-C-Am, followed by F-Em-C or Am7 if you want to include the A by the bass for the last chord.
- bars 13-16: the song now continues instrumentally. The key becomes D Mixolydian. The meter changes to 6/8, lasting just as long as the previous 4/4, thus a tempo change via a fixed relation. You could also still notate it in 4/4 with triplets all the time.
- bars 17-21: this instrumental interlude now continues with a progression in parallel octaves. It's still in D Mixolydian, using both 9/8 and 6/8 as a meter.
- bars 22 etc.: return to the main theme in the original tempo.

2. The duke of prunes (1967)

The origins of "The duke of prunes" lie in the "Run home, slow" movie. Tracks 2-4 on "Absolutely free" form a unity: the themes from "The duke of prunes" get played twice, with "Amnesia vivace" as an interlude between these two executions. Its three themes:

- 0:00 Theme A, 1st tempo, "I would be duke of prunes ..."
- 1:02 Theme A, 2nd tempo.
- 1:35 Theme B, "Prune, da-da-dah ..."
- 2:02 Theme C, "And so my darling ..."
- 2:13 End.

1

4

I would ...

The duke of prunes, 0:00-0:21. Transcription: KS (Update Spring 2018, deposited at the I-depot, The Hague).

1

4

The duke of prunes, 1:02-1:14. Transcription: KS (Update Spring 2018, deposited at the I-depot, The Hague).

Above are two appearances of the first six bars of the main theme (theme A). It gets harmonized by two alternating chords/scales:

- 1st example: Fmaj9 and Em9. Both chords are using the lower E as pedal note. These two chords differ regarding their scale. The first uses an F natural, while the second involves an F sharp. Since I'm letting pedal notes determine the keys in this study, the scales become E Phrygian and E minor alternating.
- 2nd example: the bass is now playing a figure. The applied notes are the same as in the first example, thus the chords can be identified in the same manner. The first bass note, however, the note that you could call the tonic, now differs. So the scales become F Lydian and E minor.

Another thing to notice is the tempo change. The first six bars of the 2nd example last 12 seconds compared to the 21 seconds of the 1st example, thus being played much faster.

3. Amnesia vivace

Serving as the interlude between the two "The duke of prunes" tracks, though musically in no way related to it. The spoken parts do mention "Duke of prunes". It's an experiment related to what Charles Ives once described as the effect of two marching bands approaching a square from two different directions.

Between at 1:38-1:44 on track 11 something similar is happening: two instruments are playing a similar motif, but asynchronous at first. The most bizarre experiment with this idea is happening during "Uncle rhebus", with two examples being present at the bottom of the Uncle meat section of this study. There appears to have been a documentary, available on the internet, with Philip Coulter interviewing Zappa, where Zappa is talking about references to Stravinsky in this piece. The link is dead at the moment (2019), but such references can indeed be recognized.

- 0:00 Intro.
- 0:07 Various themes being played against each other.
- 1:01 End.

1

Musical score for measures 1-7. The score is in 3/4 time and features a key signature of one sharp (F#). It consists of three staves: a bass staff, a treble staff, and another bass staff. The music is characterized by a steady, rhythmic accompaniment in the bass and treble staves, with a melodic line in the middle treble staff.

8

Musical score for measures 8-14. The score continues from measure 7. A tempo marking "A bit faster" is placed above the first staff at measure 8. The music features a prominent melodic line in the first bass staff, which is sustained across several measures. The other staves provide harmonic support with rhythmic patterns.

15

Musical score for measures 15-18. The score continues from measure 14. The music maintains its rhythmic and melodic structure, with the first bass staff continuing its melodic line and the other staves providing accompaniment.

Amnesia vivace, opening. Transcription: KS (Update Fall 2019, deposited at the I-depot, The Hague).



The Rite of Spring

Le Sacre du Printemps

First Part

ADORATION OF THE EARTH

Première Partie

L'ADORATION DE LA TERRE

INTRODUCTION
Lento \downarrow *50* tempo rubato
colla parte

Clarinetto 1 in La
colla parte

Clarinetto basso 2 in Sib
colla parte

Fagotto 1
Solo ad lib.

Corno 2 in Fa
colla parte

IGOR STRAVINSKY
Revised 1947
New edition 1967

Samples from The rite of the spring by Igor Stravinsky

The intro (bars 1-10) is in a C# Mixolydian variant, made up of a series of parallel minor thirds. When I'm hearing it correctly the F turns up as double-sharp. In bar 11 the tempo goes up a little and the playing of figures against each other begins. The G#-D#-F#-D# figure can be seen as a reference to the first "Rite of

the spring" example, that I've included below the transcription. It goes like the figure from the second from below staff of this last example. The D#-A# alternation sounds like a distorted instrument that I can't transcribe precisely (maybe more notes are involved). The bass is alternating C# and F# against these figures with a rhythm of its own. Not included in the example from above, is the clarinet melody that's played between 0:17 and 0:20: C-B-G-E-A. This goes like the opening melody of "Rite of the spring", also included below the transcription.

4. The duke of prunes regains his chops

Continuation of "The duke of prunes" from above:

- 0:00 Theme A, 2nd tempo.
- 0:32 Theme B.
- 0:58 Theme C.
- 1:06 Outro, "this is like the Supremes".
- 1:52 End.

In 1975 Zappa would once more return to this composition. The version on "Absolutely free" is the only one with lyrics. I'm dealing with the evolution of this song in the Orchestral favorites section. Examples from all three versions are present in that section, including theme B as played during "The duke of prunes regains his chops" and the first recording from 1963.

5. Call any vegetable

Zappa would include a live version of "Call any vegetable" in his "Just another band from L.A." album from 1971. The opening of this song is included in the corresponding section of my study. The 1971 version has extra themes to it. It does include a solo, but not as extensively as on "Absolutely free", where track 5 can be seen as the solo belonging to it and track 6 as the reprise:

- 5. "Call any vegetable".
 - 0:00 Theme block A, "Call any vegetable ..."
 - 0:35 Repetition.
 - 1:04 Little interlude.
 - 1:15 Theme block B, "A prune isn't really a vegetable ..."
 - 2:15 End.
- 6. "Invocation & ritual dance of the young pumpkin".
 - 0:00 Instrumental block, see below at track 6.
 - 7:00 End.
- 7. "Soft-sell conclusion".
 - 0:00 Theme block C, "A lot of people ...", see below at track 7.
 - 0:48 Theme block D, including variations upon theme A.
 - 1:11 Reprise of theme A.
 - 1:25 Outro, with the "breathing pumpkin".
 - 1:40 End.

6. Invocation & ritual dance of the young pumpkin

The "Invocation & ritual dance of the young pumpkin" is a quite long instrumental interlude, played between two sung movements from the "Call any vegetable" sequence on "Absolutely free".

1] Flute Tempo I, fast

Tempo II, start slow, keep accelerating all through, repetition incl.

Guitar *mf* *8va* →

mf Four times

Etc., parallel

(ends fast)

23] Flute Tempo III, moderately fast

Keeps repeating

Guitar *mf* *p* *mf* *p* *mf*

8va →

8va →

8va →

Loco *p* *mf*

Invocation & ritual dance of the young pumpkin, opening. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

The interlude starts with an easily recognizable example of a melody applying changing tempos and meters:

- Bar 1: tempo I in 4/4. The key is C# Dorian with the accompanying chord progression I-IV-III-IV. The bass gives a C# pedal, while the flute moves over the chords via triplets.
- Bars 5-22: a single melody in 3/4 and 2/4 (a quote from "Jupiter" from "The planets" by Gustav Holst). It starts slowly in tempo II and keeps accelerating all through.
- Bars 23 etc.: tempo III in 4/4. The key has become E Dorian.

At this point - where the third tempo remains stable as tempo III - a vamp begins with the guitar first playing a chord progression for four bars and next soloing. After a while the flute quits vamping and starts soloing as well, thus forming a duet with the guitar.

Zappa would seldom play such duets again. The ones with Jean-Luc Ponty and his son Dweezil are the best known other examples. The interlude would be played similarly on the "Freaks and motherfu*#@%!" bootleg from 1970 (see the Fillmore East 1970 section for "solo from Call any vegetable"). The official live version from 1971 on "Just another band from L.A." has a short instrumental interlude, using a different melody and vamp, though the idea of an acceleration returns. During 1970-1 Zappa used just the single "Call any vegetable" title for covering the whole, instead of the sequence of three songs.

7. Soft sell conclusion

Like "The duke of prunes", "Call any vegetable" appears on "Absoluty free" in the shape of a little sequence of three tracks. The later live versions from 1970-71 would list this sequence as just one track.

1

A - lot of - peo - ple ...

8va b.

4

8va b.

Soft sell conclusion, opening. Transcription: KS (update Spring 2018, deposited at the I-depot, The Hague).

With "Soft sell conclusion" some of the material from "Call any vegetable" returns as a coda for this sequence, as briefly indicated above. This song begins with a theme of its own, however, of which the first six bars are transcribed here. It's in E using the progression I-II-IV-V. The flute (staff 3), harmony singers (staff 2) and especially the lead vocalist from staff 1 are playing and singing quite loosely over this progression.

8. Big leg Emma

This title was originally released as a single in 1967 and got included in the CD re-release of "Absolutely free" as a bonus track. "Big leg Emma" is a traditional blues song, that Zappa first released on his "Zappa in New York" album from 1978 (recorded in 1976). Two examples from this 1976 performance of "Big leg Emma" are included in the corresponding section. Other than the 1976 version, the 1967 execution has its basis more firmly in E Dorian. Over the I chord from the blues scheme the chord progression E-F#m-G-F#m-G-F#m can be heard.

9. Why don'tcha do me right

"Why don'tcha do me right" is a third version of this song, with all three versions coming by in the Paul Buff section of this study. In 1967 it got the characteristic fuzz-tone bass line. Its first recording has been kept in the Paul Buff archive. Another jam-like version got released by the ZFT on "Joe's XMasage". It's the second bonus track on the CD, originally being the B-side of the "Big leg Emma"

10. America drinks

"America drinks" and "America drinks and goes home" are variations upon each other. The notes of the main melody are mostly the same, but the rhythmic set up is quite different. The first one is very irregular with many syncopic phrases. What's confusing listening to it, is the deliberate inequality between the parts regarding their timing. When it's done emphatically I also show it in the transcription (like bar 1, the difference between the bass and the singers, or bar 8-9, the difference between the two singers). But there are also minor inequalities at various points where this isn't notated specifically. It's utterly bizarre to perform a song in this manner. The melody itself is rather complicated. Bars 1-7 contain an entirely chromatic movement. The chord progression is Gm-Gb-F. From bar 8 onwards you can recognize parts of changing scales without clear key notes. The bass mostly supports the melody, but in bars as numbers 15-16 it's going its own way.

In "America drinks and goes home" the rhythm is more normalized towards swing time (the score of this version is included in the FZ Songbook Vol. I). It's remindful of cocktail lounge bars, with a singer and a little jazz combo. The singer is addressing himself to individual members in the audience that he knows personally. There's the talking of the people in the bar and the sound of a cash register all through this song. As it comes to the title and the atmosphere this song can be considered to be social criticism upon the habit of people to get drunk in the evening. Zappa himself played a couple of months in a lounge band - as the guitar player of Joe Perrino and the mellotones in 1961 - and came to hate it. Regarding the music it's more taking lounge music a step further than a parody upon it.

I

Handwritten musical score for system I, measures 1-4. The score includes vocal lines, guitar accompaniment, and a double bass line. The key signature has one flat (Bb) and the time signature is 2/4. The guitar part features a triplet and the instruction "Etc.". The vocal line includes the lyrics "I tried to ---". The double bass line is marked "trab.".

II

Handwritten musical score for system II, measures 5-8. The score includes guitar, flute, and double bass parts. The guitar part has a triplet and the instruction "Wanna~". The flute part has a melodic line. The double bass part has a rhythmic line. The key signature has one flat (Bb) and the time signature is 2/4.

America drinks, opening. Transcription: KS.
Update 2010, deposited at the I-depot, The Hague.

At point 1:19 of "America drinks" this song jumps overnight into a section of Vaudeville music, in all probability played at double speed on record. It's an example of polyrhythms. The first theme is in 4/8, the second one in 3/4. Through both meters the bass is playing a repeated figure in 8/8, subdivided as 3/8 plus 5/8 (as indicated in the transcription). The bass is immediately starting this figure during the pick-up notes of the lead melody. It needs a good sense of timing with only the ticking of the eighth notes by the drums to keep everything equal.

Doing such polyrhythms became part of the routines the Mothers did during improvisations. Zappa would direct such improvisations via special hand indications. He would do the normal baton type conducting, but the Mothers had also developed a set of hand symbols for specific purposes. An easy one to understand for the public was pointing a finger up to hit a high note and a fist drawn down to play a low note. For the polyrhythms Zappa would for instance hold five fingers up pushing it forward two times to indicate to someone to play in 5/8 in this tempo (as One-two, One-two-three). To the right Art Tripp indicating 5/8 as Zappa would do it, taken from the Frank Zappa and the Mothers of Invention in the 1960s DVD (Sexy Intellectual Productions, 2008). See 1h:23m through 1h:26m on this DVD for this topic. Someone else could be playing in 4/4 at the same time, thus you can create something as what's going on during the second half of "Toad of the short forest" on "Weasels ripped my flesh", where Zappa is explaining to the audience in what meters the various band members are playing.

Fast

Handwritten musical score for the first system of 'America drinks'. It consists of four staves. The top staff is in treble clef with a 4/4 time signature and contains a melodic line with eighth and sixteenth notes. The second staff is also in treble clef and contains a bass line with eighth notes and rests. The third staff is in treble clef and contains a complex accompaniment with many beamed notes and accidentals. The bottom staff is in bass clef and contains a bass line with triplets and fingerings (1-3, 1-5, 1-3, 1-5) indicated above the notes. The word 'Ovabassa' is written below the first few notes of the bottom staff.

Handwritten musical score for the second system of 'America drinks'. It consists of four staves. The top staff is in treble clef with a 3/4 time signature and contains a melodic line. The second staff is in treble clef and contains a bass line with eighth notes. The third staff is in treble clef and contains a complex accompaniment with many beamed notes and accidentals. The bottom staff is in bass clef and contains a bass line with triplets and fingerings (1-3, 1-5, 1-3, 1-5) indicated above the notes. The word 'Etc.' is written at the end of the system.

Handwritten musical score for the third system of 'America drinks'. It consists of four staves. The top staff is in treble clef and contains a melodic line with eighth notes. The second staff is in treble clef and contains a bass line with eighth notes. The third staff is in treble clef and contains a complex accompaniment with many beamed notes and accidentals. The bottom staff is in bass clef and contains a bass line with eighth notes and triplets.

America drinks, 1:19 - 1:29. Transcription: KS. Update 2010, deposited at the I-depot, The Hague.

11. Status back baby

All through his career Zappa had a collection of unreleased compositions in stock, that could stay there for years before being released on albums. Some songs only got released postumely via ZFT releases. "Status back baby" was originally intended for the "I was a teen-age maltshop" opera. I'm dealing with the two available versions of this title in the Mystery disc-Projects section. They have the same lead melody, but the manner the accompaniment is handled, goes pretty differently. The reference to Stravinsky's "Petrushka" happens at the end of the interlude (1:53-2:07).

12. Uncle Bernie's farm

"Uncle Bernie's farm" and "Son of Suzy Creamcheese" are the two more accessible songs from "Absolutely free". "Uncle Bernie's farm" has two repeated themes and two side-themes, next to a small intro. The repeated ones are in A Dorian and D Mixolydian. As noted on page 175 of the Ludwig study, Zappa frequently uses additional vocals and musical effects to comment upon the lyrics of the main part. In case of "Uncle Bernie's farm" he mentions:

<i>Main text:</i>	<i>Comment:</i>
- There's a bomb to blow your mommy up	Laughter in the background
- A bomb for your daddy too	Outch!
- A case of airplane glue	Vocal hiss
- A hungry plastic troll ...	Smacking sounds
- There's a little plastic "Congress" ...	Voices in the background

There's a multitude of such instances. Just three more examples from this study:

- Can't afford no shoes:

Have you heard the news? Comment: News, what news?

- The groupie routine: autohorn.

- Lonesome cowboy Burt:

All my friends, they call me Burt. Comment: Hi Burt.

- Artificial Rhonda:

Do you come here often? Comment by Thing-Fish: Yauw!

Thing-Fish is in effect commenting through most of "Thing-Fish" when he's not singing himself. Another quite obvious example is the bar environment of track 15 below, "America drinks and goes home", with audible cash registers and people talking all through.

13. Son of Suzy Creamcheese

The score of "Son of Suzy Creamcheese" can be found in the "Frank Zappa Songbook vol. I", pages 65-68. This song also has a regular two-themes structure, each theme being repeated a couple of times (no side-themes this time). Both themes are brief, causing the song to be short too. The sample from below is the second theme with one bar in 4/4, followed by another one in 9/8.

Cmaj7 Bm7 Am7 Gmaj7 Am7 Bm7 Em

Su - zy you were such a sweet - ie } Yeah, yeah, yeah.
 Got to find my Su - zy Cream-cheese }

Son of Suzy Creamcheese, theme two. Source: The Frank Zappa Songbook vol. I.

Harmonically this piece is written as a chord progression with the bass being part of these chords, thus without pedal notes. Theme one begins suggesting A Mixolydian. Theme two ends more clearly in E minor with a classical type of coda: IV-V-I. The song ends with an instrumental variation upon this theme two with the 9/8 bar being split up into three augmenting bars, 4/8 + 5/8 + 6/8. It's followed by a final bar with only a chord, functioning as a deceptive cadence. It's an Asus2 chord. Instead of confirming the E minor tail from theme two once more, it jumps back to the A Mixolydian tonality of theme one.

14. Brown shoes don't make it (1967)

"Brown shoes don't make it" has become a classical Zappa song, because it's such an elaborate example of Zappa's habit to bring different styles together in one song. The song has a multitude of themes, which are played after each other in a medley-like way, where the changes from one theme to another are abrupt, but without losing an overall structural idea. Most sections use various scales, but without a clear use of keynotes. "Brown shoes don't make it" has appeared on CD in two versions: the original studio recording and a live version, which has appeared on "Tinsel Town Rebellion". The latter was released in 1981, but this version for stage performance must have been in use much longer, because it's the version that Ian Underwood has transcribed in "The Frank Zappa Songbook vol. I" of 1973. The differences between the two versions are mostly in the instrumental passages.

General structure with starting time indication:

a) 0:00. Opening with a rock 'n roll riff in F sharp Dorian with the chord progression I 7th - IV 5th.

Guitar

Bar 2 keeps repeating

Brown shoes don't make it, opening riff. Source: The Frank Zappa Songbook Vol. I (Songbook).

Note: the actual album versions, on *Freak out!* as well as on *Tinsel town rebellion*, are executed slightly different from the Songbook, namely with triplets as above (Aaron Wolf wrote me about this).

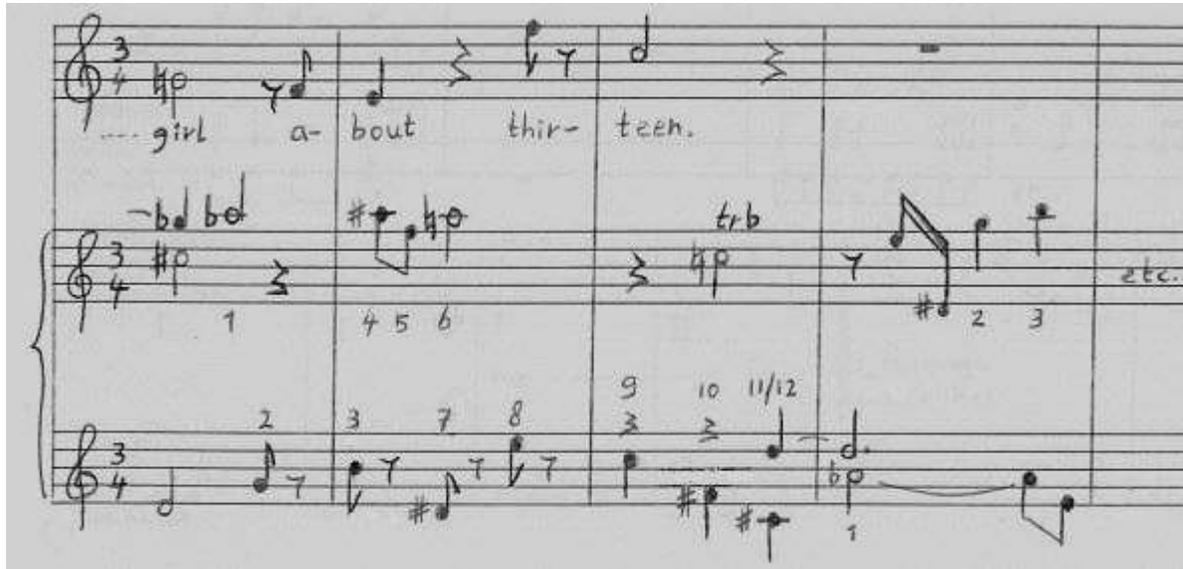
b) 0:20. The riff changes overnight into a section with straight rhythms in a 4/4 movement. It starts with a sequence that is chromatically repeated instead of within a key. Thus the key changes with every bar using a different scale (the 5 bars "tv dinner by the pool" till "he's a bummer"). The scales, when taken as major, are in following order C, D flat, C, B flat and A. With "smile at every ugly..." we get to one of the tempo changes in the song.

Brown shoes don't make it, opening melodies. Source: *The Frank Zappa Songbook Vol. I (Songbook)*.

c) 0:52. Back to the rock 'n roll riff.

d) 1:22. Section with straight rhythms in a 3/4 movement. The scales keep changing and in three bars the melody gets atonal ("On a rug ... and drool").

e) 2:07. This section is followed by a larger atonal intermezzo. The references to modern music on "Absolutely Free" have often been mentioned, most notably a quotation of one of the opening motifs from Stravinsky's "Petrouchka", that can be heard in the middle of "Status Back Baby". This part is a reference to serialism with the twelve-note string of the "Waltz for guitar" from the Zappa's teens section being re-used. In this case it's not a strict 12-note piece anymore however, because the string is used with a lot of liberty and additional notes. Below is an example of the re-use of this string. In the Songbook it's notated a minor second higher than in the "Waltz for guitar" and the first "Absolutely free" recording.



Brown shoes don't make it, fragment. Source: Songbook.

(In the first edition of this study, the "Waltz for guitar" example wasn't included nor had I noticed the similarity. I gave some examples of the returning C, F sharp, C sharp plus D, and A flat movement, which turns out to be 9-12 and 1 of the string).

f) 3:03. After the intermezzo starts a block with themes in various swinging rhythms. See "Brown shoes don't make it (1981)" from the later Tinsel Town Rebellion album for three examples from this block.

g) 6:06. Back to the straight rhythm in a 4/4 movement. The bars "tv dinner by the pool, I'm so glad I finished school" are repeated, indicating the coming closure of the song.

h) 6:45. Instrumental coda.

Zappa often liked to bring changes in a sudden way, not only during a song but also from one song to another, where instead of the usual fading out or playing of a closing chord at the end of a song, he just cut it off and let the next song begin without any pause between the songs. For the song's instrumentation Zappa uses different groups of amplified and acoustical instruments. He called this combination of instruments his electronically amplified orchestra. He continued to do so in his career, the band including at least six members and sometimes more than ten. These bands are using various combinations of amplified and acoustical instruments, differing from time to time. Next to a drummer the band almost always included a percussionist. The latter not only for additional rhythm, but also with an explicit role for playing melodies.

15. America drinks and goes home

The score of "America drinks and goes home" can be found in the "Frank Zappa Songbook vol. I", pages 62-63. It's a variation upon track 10, that I've described above. Zappa himself has referred to this song as using the II-V-I progression, a progression he claimed to dislike. Only roughly this progression can be recognized. The song modulates all the time and it can only be interpreted as II-V-I when you're allowed to skip chords or add different chords, both in the piano reduction from the Songbook and the actual performance on record. An attempt to recognize the progression has also been done by B. Clement. The example below includes bars from all three angles.

The first thing that you can see here is that the album version goes pretty different from the Songbook. The most notable differences are:

- While the Songbook is precise about the chords, on the album people are playing freely through the scales.
- In bar 4 the singer hits upon an A while on the album the singer uses a B (natural).
- The Songbook prescribes perfect triplets. On the album this isn't the case.
- Bar 8 from the Songbook stays in D, while it briefly evades to Eb minor on album.

Bars 1-2 are a little intro in C Mixolydian. You've got people talking in the background all through this song, as if it's recorded in a crowded bar. Bars 3-5 form a sequence. A phrase gets varied upon while its starting point is chromatically moving downwards. The scales being used on album are G Dorian, F# Dorian and F. Bar 4 seems to contain writing errors in the Songbook version. The G7 guitar chord must probably be Gm7 and the Bb should be an A. One might call the harmonies of bars 3-5 just I or I-V-I. Within the context of II-V-I it would mean that the II chord is skipped. This II chord does appear during bars 7-10, that are in D. Bar 7 on the album and bars 7-8 in the Songbook are using II. On the album bar 8 begins with what you might call V (Clement indicates the harmony as A7). Beats three and four are using chromatic passing notes. The chord/scale at this particular point could be called Ebm#7 or Eb minor (the variant with the augmented 7th). This isn't happening at all in the Songbook. Since the Songbook is official material, playing it like this should be seen as a permitted version too.

So it's II-V-I with some liberty. Situations like this are also happening during theme II from "Lemme take you to the beach", "Bobby Brown", "Babette" and the instrumental opening from "Baby take your teeth out" (II-V-I with an additional chord). In the Real Frank Zappa book he calls this progression a hateful rule from harmony classes, the essence of bad white-persons-music. Personally I think Zappa is both being unfair to the quality of some of his own songs as to the intentions of (traditional) harmony. These aren't rules in an absolute sense, that is you can find non-resolving chords with all classical composers. It's also nonsense to say that all classical music got commissioned and thus had to follow the rules. Many of Bach's best works were written, and sometimes printed, at his own initiative. As it comes to conventions you can find simple traditional music in his own catalogue too. See for instance "Babette" from the YCDTOSA section. That one is a simple love song, that one might try to explain away as a parody. But there's a large number of easy going love songs in Zappa's catalogue, by himself or as covers. In my opinion too many to call these parodies.

The image displays a musical score for the song "Babette". It features a vocal line and a guitar accompaniment. The vocal line is written in a soprano clef (8va) and includes the lyrics "I've tried to find ...". The guitar accompaniment is written in a standard treble clef and includes a section labeled "(by approximation)". The score is set in 4/4 time and includes various musical notations such as triplets, chromatic passing notes, and specific chord symbols like Gm7 and Ebm#7. The score is divided into three measures, with the first measure starting with a triplet of eighth notes.

8va

8va

America drinks and goes home, bars 3-10. Transcription from CD by KS, where some elements could be taken over from the Songbook.

Update Spring 2018, deposited at the I-depot, The Hague.

Moderate slow

Gm9 3 fr.

(This is a special request. Hope you enjoy it.)

gva *glia.*

I've tried to don't re -

find gret how my heart could be so blind, dear, -
 hav - ing met up with a girl who -

How could I be fooled just like the rest.
 breaks hearts like they were noth - ing at all.

Em7 2 fr. Fmaj7 Fm9 6 B+7

Em7 3 Dmaj7 3

America drinks and goes home, bars 1-9. Songbook version.

Example 4.1. “America Drinks & Goes Home” (*Absolutely Free* 0:12–0:35).

The image displays two staves of musical notation in 4/4 time. The first staff contains five measures of music. Above the staff, chord symbols are placed: Em7, A7, DM7, Ebm, and Bb7. Below the staff, a bracket spans the first three measures with the label 'ii' underneath. Another bracket spans the last three measures with the label 'I' underneath. The second staff contains six measures of music. Above the staff, chord symbols are placed: Am7, D7, Cm7, F7, Bbm7, and Eb7. Below the staff, a bracket spans the first two measures with the label 'G: ii' underneath. Another bracket spans the next two measures with the label 'V' underneath. A third bracket spans the last two measures with the label 'Ab: ii' underneath. The label 'V' appears again below the final measure of the second staff.

America drinks and goes home example from the Clement study. The first bar corresponds with bar 7 from above.

WE'RE ONLY IN IT FOR THE MONEY: THE SIXTIES

In 1967 the Los Angeles freak scene was completely overrun by the world wide spreading Flower Power movement, that had its origins in San Francisco. Zappa wasn't fond of their ideas, certainly not their positive attitude towards drugs. His music already needs concentration playing it sober, so the idea of musicians on drugs while he was paying for their time was unacceptable for him. On his contrary album "We're only in it for the money", he reproduces their ideals while at the same time adding demeaning remarks to it ("forgive me because I'm stoned"; "flower power sucks"). Because the Flower Power movement lost its innocence and impact with the Rolling Stones concert at Altamont in 1970, "We're only in it for the money" has with hindsight become a reflection upon the sixties. Zappa still found himself kicking at remnants of the movement in his eighties songs "The blue light" and "We're turning again".

The music on the album is - regarding meters, rhythms and chord progressions - less complicated and it is an example of the more commercial side of Zappa. Still there can be some complex parts in it. The construction of the songs on the album can also be sophisticated. "Flower punk" is as a progression for instance relatively easy. "What's the ugliest part of your body?" below deals with rhythmic complexities. In "The Real Frank Zappa Book" of 1989 Zappa uses three pages arguing against the "hateful practices" of traditional harmony, especially the chord progressions that are played over and over again in pop music and the chords of resolution you had to write down to pass a harmony course (The Real Frank Zappa Book, chapter 8, section "hateful practices"; Zappa!, page 32).

Zappa's attitude towards traditional harmony is ambiguous however, because he applied common chord progressions with just as much ease as he liked to deviate from them. See the Joe's Garage section for Joe's love declaration to I-IV-V. He even had a weakness for deliberate simplicity, represented in the teenage love songs from "Cruising with Ruben and the Jets" (1968). Sections from "Absolutely free" and "Mother people" are included below as examples of uncomplicated chord progressions (all 5th chords unless indicated). The Cruising with Ruben and the Jets section contains of few more similar examples. It's a commonplace in rock 'n roll history that "Sergeant Pepper's lonely hearts club band" by the Beatles is the first concept album, usually without explaining what then this concept is. I guess it's the packaging, the instrumentation and maybe the quality of each individual song. Some Zappa fans have argued that the Mother's first two albums could then be considered concept albums as well. Indeed all Zappa's albums each have some form of a conceptual idea behind them. It can be in style, it can be in the lyrics and it's about always present in the sound of an album. For the three albums from this section and the next two the concept is outspoken and obvious, regarding both the music and the lyrics. "We're only in it for the money" is about the hippie era with relatively main stream music combined with some experimental tracks.

1-2 Are you hung up - Who needs the Peace Corps?

The album opens with "Are you hung up", one of a number of collages of spoken texts and sound effects, frequently mutated. On the ZFT release "Lumpy money" you can find instrumental recordings from a number of songs from "We're only in it for the money", among them "Who needs the peace corps?". This release also contains a 1984 re-mix of this album with a newly recorded bass and drum part. Zappa did the same for "Cruising with Ruben and the jets". What happened is discussed in the corresponding section in this study for the latter CD. Quite some fans felt undignified by this step, so Zappa decided to revive the original 1968 recording for today's CD version of "We're only in it for the money".

1

5

What's there...

8

Think I — just drop out ...

Who needs the Peace Corps?, intro and theme 1. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

To gain an understanding of Zappa's approach to system shifts, let us begin by investigating oscillating progressions akin to L/M and D/M, but which feature pedals/chords in different systems. For example, the opening chord oscillation of "Who Needs the Peace Corps?" (1967/1968) uses the tritone pedal progression C–F♯. As this pedal motion cannot occur in a single LS, Zappa employs scales from two different systems: C Lydian and F♯ Dorian, respectively. The choice of F♯ Dorian proves musically fortuitous, as its LS (A) shares four common tones with C Lydian; of these, F♯ is given particular melodic emphasis at the beginning and ending of the phrase (0:08–16, *We're Only in It for the Money*, 1968). A similar example is the

Brett Clement, *A New Lydian Theory for Frank Zappa's Modal Music* (Music Theory Spectrum, Spring 2014, page 161). Since I'm not hearing a D/D# upon the F# pedal parts, the scale upon F# might be called minor too. LS A stands for Lydian system A (see the left menu for its meaning). Anyway, in case of F# minor there are five tones in common and it would be Lydian system D in Brett's terms. In his Response to me, Brett writes "not enough melodic info, I'd guess Dorian instead". So Brett isn't positive about this episode being in minor or Dorian either.

In "Who needs the Peace Corps?" you can hear a couple of different modal scales coming by, which is common practice in Zappa's music:

- 0:00 Intro with a C and Bb chord alternation in C Mixolydian in staff 1. The total harmony can be bigger, like C7 occurring in bar 1 and C9 in bar 3.
- 0:08 Theme 1 with a C and F#m chord alternation for bars 5-8. These two chords don't belong to the same scale. Combined with the melodic notes, the implied scales are C Lydian and F# minor/Dorian. The analysis by B. Clement is added to the example. Via the Em and D chord this theme ends in D (bars 9-10).
- 0:21 Theme 2 in A Mixolydian.
- 0:26 Theme 1.
- 0:38 Theme 2, extended instrumentally.
- 0:57 Theme 3 in F Lydian.
- 1:14 Variation upon theme 1.
- 1:24 Theme 3.
- 1:42 The chord alternation from theme 1 is maintained to the end.
- 2:43 End.

See the *Burnt weeny sandwich* section for an overview of the use of scales in all examples in this study.

3. Concentration moon

The set-up of "Concentration moon" is as follows:

0:00 Theme 1, phrase 1. This section is in Bb, the meter being 3/4. The chord progression, being used here, is an easy going one: I-IV-I-V 7th-V and back to I. The first example below is the opening of the song, showing this progression in bars 1-4 and bars 5-8.

Handwritten musical score for the first system, labeled with a circled '1' in the top right corner. The score is arranged in five staves:

- Vocals:** The top two staves show vocal lines. The lyrics are "Con - cen - tra - tion - moon -". The melody is written in a treble clef with a key signature of two flats and a 3/4 time signature.
- Keys:** The next two staves are for keyboards. The upper staff contains a melodic line with a triplet of eighth notes and a sixteenth-note triplet. The lower staff contains a bass line with a triplet of eighth notes.
- Guitar:** The third staff is for guitar, featuring a series of chords and a triplet of eighth notes.
- Bass:** The bottom staff is for bass, showing a simple bass line with a triplet of eighth notes.

The second system, labeled with a circled '5' in the top right corner, continues the piece:

- Vocals:** The top two staves show the continuation of the vocal lines.
- Keys:** The next two staves continue the keyboard accompaniment, including a melodic line with a triplet of eighth notes and a bass line with a triplet of eighth notes.
- Guitar:** The third staff continues the guitar accompaniment with chords and a triplet of eighth notes.
- Bass:** The bottom staff continues the bass line with a triplet of eighth notes.

Concentration moon, theme 1, phrase 1. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

0:24 Theme 1, phrase 2. The progression here is VI-II-IV-V, still in Bb, followed by four more bars with only an F pedal.

0:41 Theme 2, phrase 1. The bass pedal note switches to C. The set of notes remains the same, thus the scale becomes C Dorian. Here you've got a single vocal line, instead of the close harmony group from the first example. The melody goes downwards, while the pass plays a simple figure upwards, thus creating a light form of counterpoint (bars 1-2 of the second example). The harmonies are now less common: I-III-IV 11th (no 5th)-VI 9th (no 3rd).

0:52 Theme 2, phrase 2. This part doesn't follow a single scale, nor a single pedal note. As shown in the second example:

- bar 3: Bb pedal plus a Dm chord.
- bar 4: Bb pedal plus Am-5.
- bar 5: Db pedal plus Fm7.
- bar 6: chromatic movement.

1:05 "Tomorrow ...". Whispering voices.

1:13 "Hi boys and girls ...". The famous Jimmy Carl Black line.

1:17 Themes 1 and 2 repeat.

2:22 End.

4. Mom & Dad

The structure of this song can be readily followed, using the arrangement in the FZ Songbook vol. I, pages 84-87:

- 0:00 Two instrumental bars in E Dorian are used as a transitional element all through this song. This is their first appearance as a little instrumental intro.

- 0:04 Theme 1 ("Mamma ...") with a chord progression, not belonging to one specific scale.

Nominally the example below is in E Dorian or minor. It begins like that and the text of theme one ends here with "lay" (not shown below), coinciding with the first chord of the instrumental bars, that follow upon it. It thus begins and ends in E Dorian, but in between it's more multi-scale oriented. With the C being natural during bars 3-8 one might also decide for E minor as the best fitting scale and interpret the C# and F natural as altered notes. - 0:21 The instrumental bars.

- 0:24 Theme 2 ("You'll sit ...") in C.

- 0:34 The instrumental bars.

- 0:39 All of the above from theme 1 onwards gets repeated.

- 1:10 Theme 3, phrase 1 ("Ever take a minute ..."), in F Lydian.

- 1:21 Theme 3, phrase 2 ("Ever tell your kids ..."), with a Bbmaj9 - Abmaj9 chord alternation. What you hear are major sonorities, not attributable to one or two particular scales (I earlier referred to these bars as Bb Mixolydian, but that was too hastily). Combined you've got A natural next to Ab and individually these chords with their melodies don't generate enough notes to be sure about a scale.

- 1:30 Theme 3, phrase 3 ("Ever wonder why ..."), in D Dorian.

The image shows a musical score for the song "Mom & Dad". It consists of two systems of music. The first system has a vocal line and a piano accompaniment. The vocal line starts with two instrumental bars, followed by the lyrics "Ma - ma! Ma - ma! Your". The piano accompaniment features a triplet in the first bar. The second system also has a vocal line and piano accompaniment. The vocal line has the lyrics "child was killed in the park to - day, Shot by the cops as she qui - et - ly". The piano accompaniment includes a 2/4 time signature change in the final two bars. Chord diagrams are provided for Em, F9, C(susD), D(susE), E(susF#), D(susE), C(susD), and F.

Mom & Dad, top of page 87 from the Songbook. The first two bars are the two instrumental bars, followed by the return of theme 1.

- 1:40 The instrumental bars and theme 1 return.

- 1:57 The instrumental bars, followed by a variation upon theme 2 as the coda of this song. With the final sentence ("they killed her too"), the song neatly modulates back to the E Dorian tonality from the beginning. The latter you could call "by the book" as it comes to classical tonality.

- 2:16 End.

The meter of this song is 4/4 without rhythmic difficulties, on three occasions interrupted by a bar in 2/4.

5-6. Telephone conversation - Bow tie daddy

"Telephone conversation" is a recorded telephone call between two of Zappa's friends, with one woman warning the other about her father looking for her. So the lyrics of the next track must be meant as Zappa's reaction to this situation. This song, "Bow tie daddy", is musically in an interbellum style for a change. It has its basis in C (most specifically bars 1, 4 and 5), but keeps changing scales frequently. From bar 8 onwards the modulations start to dominate. The lead melody is rhythmically characterized by its alteration of on beat notes and various forms of syncopes. The syncopes are created via triplets, bows and dotted notes. See also the Lumpy gravy section for "It's from Kansas" for another example of such music.

The image displays a handwritten musical score for the opening of 'Bow tie daddy'. The score is organized into three systems, each containing four staves. The first system is marked 'mf' and includes the handwritten title 'Bow tie---'. The second system is marked 'mp' and includes the handwritten title 'Asbar 1'. The third system is marked 'mf'. The music is written in 4/4 time and features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. Numerous triplets are indicated with a '3' and a bracket. The notation includes various accidentals (sharps, flats, naturals) and dynamic markings. The handwriting is clear and legible.

Bow tie daddy, opening. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

Compared to other rock composers Zappa's inclination to use non-traditional harmonic patterns is one of his distinctive features. We'll see a lot of it in the coming sections. It is understandable that Zappa liked to put the accent on this in his interviews, but if he didn't apply normal patterns as well his albums would never sell and Zappa would never have reached the status and financial independency as he has done. Apart from "We're only in it for the money", we have albums as "Apostrophe (')", "Sheik Yerbouti" and "You are what you is", that show Zappa's commercial side and sold well for Zappa standards. As he himself has remarked the London Symphony Orchestra recordings would have been financially impossible without these albums.

One of the things that bothered Zappa for a while was to get his music played on the radio and the production of a hit single. Why some singles become hits and others don't is a territory that has many haphazard elements in it. It certainly helps to write a catching melody, that has the effect on people of "gee, I'd like to hear this again", also when only half listening. But fashionable aspects in the sound building and a direct emotional appeal get in the picture as well. Zappa had no specific sense for writing hits and besides that he refused to adapt his lyrics to a level that wouldn't offend anybody. Eventually Zappa did get two hits when his name was already well known. "Bobby Brown" from "Sheik Yerbouti", an example of a song with a catching melody, hit the charts in two European countries, where the lyrics formed no real problem, and "Valley Girl" from "Ship arriving too late for a drowning witch" sold well in the U.S. The latter due to a gimmick in it, with his daughter Moon portraying a spoiled west coast teenage girl. See the Does humor belong in music and Drowning witch sections for more about these two songs.

7. Harry you're a beast

The score of this song is or used to be available via www.zappa.com in an arrangement by Jon Nelson. You could try to contact the ZFT for a copy. The song has lyrics on "We're only in it for the money", but can be heard in an instrumental version on "Make a jazz noise here" and "Lumpy Money". It's a short song with the following harmonic basis (with the times from the "We're only in it for the money" version):

- 0:00 Piano intro with the chord progression F#m-Bm-D-E as arpeggios, continuing with playing through E7-9.

- 0:12 Theme 1 in A Mixolydian.

- 0:30 Theme 2, phrase 1. Chromatic parallel movement of major triads, F-F#-G.

- 0:38 Theme 2, phrase 2. Two more major triads, G-A.

- 0:44 Snorks with some atonal accompaniment.

- 0:51 Theme 2, phrase 1, some more.

- 0:59 Theme 3 with C#7-B7.

- 1:06 Theme 4. Instruments: first an Ab+Eb - Db+F alternation (as single notes), followed by a second B+F# - E+G# alternation. Vocals: an Ab-Bb alternation, followed by a B-C# alternation. The second formation is a transposition of the first one.

- 1:13 The progression F#m-Bm-D-E from the opening is now used as a coda.

- 1:21 End.

With the exception of theme one, this piece is very much composed as a progression of chords, unrelated to an overall scale. Instead, these chords seem to imply a scale each by themselves. It's diatonic with scale fragments. Only theme one is stable in A Mixolydian, with a melody with a standard accompaniment. This matter is also discussed in my "The idiot bastard son" analysis in the YCDTOSA Vol. II section of this study.

I seem to have miswritten myself in the table from my discussion with Clement, where I put the tonic A in the Aeolian column instead of the Mixolydian column (and the C# Locrian remark doesn't belong there).

The song is obviously in A Mixolydian, as also Clement indicates.

8. What's the ugliest part of your body?

"What's the ugliest part of your body?" is a returning song on "We're only in it for the money" in the shape of a collage. Here things are getting more complicated. The chords are standard, but rhythmically it's complex: changing meters, including odd ones, a tempo change and various syncopic forms in the lead melody.

The image displays two systems of handwritten musical notation for the song "What's the ugliest part of your body?".

The first system, marked with a square containing the number 14, consists of four staves. The top staff is the vocal line, starting with the lyrics "What's the --". The second staff is the piano accompaniment, featuring a complex, syncopated melody. The third and fourth staves provide harmonic support with chords and bass lines. The key signature is one sharp (F#) and the time signature is 6/8.

The second system, marked with a square containing the number 17, also consists of four staves. The top staff continues the vocal line. The piano accompaniment in the second staff shows a change in meter to 7/8. The third and fourth staves continue the harmonic accompaniment. The key signature remains one sharp (F#). The system concludes with the instruction "Ovb." (Overbass) and a final chord.

13 *Faster*

All your--

As bar 13

Avabassa

17

Others repeat bars 13-16

21

Int Where did--

mp Where--

All others as bar 13

What's the ugliest part of your body?, section. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

It's made up of three themes as presented in the following block of transcribed bars:

- Theme A, bars 1-12: the main theme in doo-wop style. The bass is giving the root notes of the basic

chord progression, being I, VI 7th, IV and V in G. This four bar bass progression gets repeated three times. The doo-wop element lies in the accompanying vocal harmonies in the second staff.

- Theme B, bars 13-20: the second theme in 7/8 falls in abruptly. In fact it has nothing in common with theme A. The meter is different, the tempo is different and the keys are different, so you could just as well say that a new song is starting here. It's using more than one scale, the chord progression in rock notation being C, A, Am7 and D.

- Theme C, bars 21-24: a third theme in the same tempo as the previous one. This one is doing a little sequence gliding through scales as well. The progression here is formed by three minor chords going down, following the chromatic scale, followed by one major chord: Bm, Bbm, Am (plus a vague D in the bass) and Ab. In staff 2 a second voice is singing a quarter note behind the lead vocal, somewhat softer in the background, thus creating an echo effect.

The collage construction of this song is set up via two means:

- The song itself can be split into two halves as indicated.

- The A theme is just sung once and doesn't return in the song itself. It returns much later on on the CD, namely 9 tracks further ahead in the form of a reprise. During this second track the theme does get varied upon, though in an unconventional way by speeding up its phrases.

9 Absolutely Free

Next is a section of the melody from "Absolutely free", being theme one from the overview below. The chords here are first in F Mixolydian, I-II-I-V (bars 1-8), then in A flat, I-IV-V-VII (bars 9-12), followed by two closing chords in F Mixolydian, I-VII (bars 13-15). Hereafter the song rolls back into I of the opening theme.

The image displays a handwritten musical score for the opening of "Absolutely Free". It consists of two systems of music. The first system, starting at measure 1, features a vocal line in treble clef with a key signature of one flat and a 7/8 time signature. The lyrics "Dis- cor- ..." are written under the notes. Below the vocal line is a guitar part with a treble clef and a bass part with a bass clef. The guitar part includes a "Guitar" label and a "Dis- cor- ..." label. The second system, starting at measure 9, continues the melody and accompaniment. The score is written in ink on a white background.

Absolutely free, opening. Source: Songbook (piano excerpt adapted for guitar/bass by KS).

Em-Dm (album pitches) or A-G-F#m-Em (Songbook pitches). Still the positioning of these chords is such that the Songbook version sounds different. In the Songbook the piano plays around these chords. On the album the descending bass dominates. So the song ends in D Dorian or E Dorian respectively.

10 Flower punk

"Flower punk" contains a repeating theme, its structure being relatively easy compared to the songs from above. The overdubs at the end however give this song a quite unusual character: on one channel you hear a hippie dreaming about achieving his ideals while on the other channel a manager talks about how to invest all the money that comes from it.

The image shows a handwritten musical score for the song "Flower Punk". The score is written on six staves, organized into three systems of two staves each. The key signature is two sharps (F# and C#), and the time signature is 4/4. The first system (staves 1-2) shows the beginning of the piece with a treble clef and a bass clef. The second system (staves 3-4) contains the vocal melody with the lyrics "Hey — pap, where are y' go-ing with that" written below the notes. The third system (staves 5-6) continues the instrumental accompaniment, featuring a prominent descending bass line with triplets in the lower register. The score is marked with various musical notations including notes, rests, and dynamic markings.

The image shows a handwritten musical score for the song "Flower punk". It consists of five staves. The top two staves are vocal lines in treble clef, both with the lyrics "flower in your head". The third staff is a guitar line in treble clef, starting with a double bar line and a fermata. The fourth and fifth staves are bass lines in bass clef. The fourth staff has handwritten labels: "Other as bar 2", "As bar 2", "As bar 3", and "As bar 4" above the staff. The music is in the key of B major (two sharps) and 4/4 time.

Flower punk, 0:00-0:13. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

This theme is made up of two quite different phrases:

- Bars 1-2 in 4/4 with the progression B-(B7)-B-E-B-A-B in B Mixolydian. The track is sped up to getting between keyboard pitches (Rykodisc RCD 10503). B quarter-tone sharp Mixolydian is actually the more accurate key as it comes to what you hear. See also below at "Lonely little girl". I can't tell what the pitch was before speeding up.

- Bar 3 in 12/8 with the progression G-D-A-E. The music is shortly passing through G and A (major or Lydian), with the singers and the accompaniment following contrary melodic movements.

These two phrases are getting repeated till half-way the song. Then it fades out and the bass motifs from it get varied upon with the mentioned overdubs. Phrase two is a variation upon the main theme from "Hey Joe" by W. Roberts, best known in the version of the first hitsingle by Jimi Hendrix. Hendrix is present on the inner sleeve construction set for the album. To the right a section from one of the photos taken during the session, with Hendrix, the Mothers, Gail and Frank with his foot on a Beethoven bust ("Lumpy Money" booklet). It got turned into a collage by Cal Schenkel, filling up the empty space with among others pictures of famous people. Hendrix gave Zappa one of his burnt Strats, which he let repair. See the Dominic Chevalier book, page 97, for a large photo of it. Hendrix put his guitar in the center of his music, using many guitar effects like feedback. He turned out to be a good soloist too as you can hear on "Band of gypsies", his only official live album. Because Zappa normally kept good relationships with fellow rock stars, the hostility towards the hippie movement in the lyrics of "We're turning again" from 1985 caused some estrangement among some people.

11-12 Hot poop - Nasal retentive calliope music

With these two tracks Zappa continues with the idea of adding collages to this album. MGM objected to some sentences Zappa had recorded and forced him to disguise or eliminate them. Because of this there are small version differences between some releases, as discussed in the Cosmic Debris book by Greg Russo, son of revisited version, page 62. This applies for instance to "Hot poop". Zappa describes "Nasal

retentive calliope music" as the overture to side two of the original vinyl album. This side contains a series of songs he had in stock, not specifically addressing themselves to the hippie movement.

The image shows a handwritten musical score on a page with six staves. The top two staves are for vocalists. The first staff is labeled 'Vocalist #1' and contains rhythmic notation with some accidentals. The second staff is labeled 'Vocalist #2' and contains the lyrics 'God, it's god, I see god-.' with dynamic markings 'f' and 'mf'. The third staff is labeled '(No meter)' and contains the lyrics 'Beau-ti-ful.' with dynamic markings 'mf' and 'f'. The next three staves are grouped under a bracket labeled 'Hiss and electronic noises' and contain various rhythmic and pitch markings, including 'mf', 'mp', and 'f'. The bottom staff is a bass line with dynamic markings 'mf' and 'f'. The score is divided into measures by vertical dashed lines.

Nasal retentive calliope music, 0:22-0:27. Sketch: KS (update Winter 2019, deposited at the I-depot, The Hague).

From the point view of studying all of Zappa's music independently of its nature, the existence of sound collages in his output is problematic. It is musical, so something that should be looked at, but it's hard to catch in standard notation and even impossible to convert into midi format. The above is only a small fragment from "Nasal retentive calliope music" with the status of a sketch only. You've got layers of electronic noises and hisses on top of each other, that have pitches to a degree. It visualizes on a very small scale some elements that you can also readily hear: it is atonal, it knows no meters and it's irregular. But it doesn't specify the non-standard electronic sounds. Percussion is present with mutated sounds too, where I've limited myself to distinguishing lower and higher beats only. Better recognizable are the two vocalists. One is saying "beautiful". The other is the often quoted line by Eric Clapton, where he's reacting to a fan of his having painted "Clapton is God" on a wall. The piece ends with the opening from "Heavies" by Paul Buff, a single by the Rotations, that Zappa and Buff worked on in 1963. It's blues based surf music, brutally cut off for the next song.

13. Let's make the water turn black (1968)

Next are the outlines of "Let's make the water turn black", based upon the Songbook:

- 0:00 Instrumental opening in C with the Csus2 chord as an arpeggio.

- 0:07 Central theme ("Now believe me ..."). For the intro and this main theme you can follow the transcription of the instrumental live version of "Let's make the water turn black (1988)", as included in the Best band you never heard in your life section of this study. It doesn't go identical, but reasonably comparable.

- 0:21 Central theme repeats ("Early in the morning ..."), its last two bars going differently.

- 0:35 Theme 2 in G Mixolydian ("Whizzing and ..."), being a character variation upon the central theme. It's taking over the rhythm of the central theme with the eighth note as central time unit, but has a melodic line and chords of its own. The meter is 4/4 all through this song.

2. Bb A D G F

feed - ing all the boys at Ed's Ca - fé! Whiz - zing and past - ing and

G F G Am7 Bm7 Cmaj7 D9

poot - ing through the day... (Ron - nie help - ing Ken - ny help - ing burn his poots a - way!)_ And

G F Eb D Fm Ab G

all the_ while on a shelf in the shed: KEN - NY'S LIT - TLE CREA - TURES ON DIS - PLAY!

Let's make the water turn black. Page 53 from the Frank Zappa Songbook, vol. I (the meter is 4/4).

This example from the Songbook begins with the last two bars of the repetition of the central theme. This theme starts brightly in C, but soon altered notes are getting involved. These two ending bars follow a parallel progression of major triads: Bb, A and D. It's something Zappa does more often, with the effect that such a movement doesn't belong to one specific scale. Theme 2 begins in G Mixolydian but starts to evade from this key pretty soon as well. As you can see the last four bars from the example from above contain a progression of six major triads, only interrupted once by a Fm chord. So it's much multi-scale oriented, though in this case the final chord confirms the tonic of theme 2.

- 0:49 Central theme ("Ronnie saves his numies ..."), its last two bars again going differently.

- 1:04 Theme 3 in E Dorian, another character variation upon the central theme.

- 1:17 Theme 2 returns.

- 1:31 Central theme ("Ronnie is in the army ...").

- 1:44 The last two bars of the central theme are played as during the second repetition and get repeated twice. It's getting lightly varied upon at the end by letting the final chord switch from Am to A. Not letting a song end upon the tonic is normal in Zappa's music. Here the end has something of a deceptive cadence as well. While the Am chord belongs to the C major scale of the central theme, the A chord suggests a switch to a different key:

The image shows a musical score for the song "Wait till the fire turns green." It consists of two staves: a vocal line and a piano accompaniment. The vocal line is written in treble clef and includes the lyrics "(wait till the fire turns green.)" and "WAIT TILL THE FIRE TURNS GREEN!". Above the vocal line, guitar chord diagrams are provided for F, G, Am, F, G, and A. The piano accompaniment is written in grand staff (treble and bass clefs) and features a steady bass line with chords that support the vocal melody. The score is divided into two measures by a double bar line, with the second measure ending on a final A chord.

- 1:52 Little collage of spoken parts.

- 2:00 End.

14. The idiot bastard son

Three versions of "The idiot bastard son" get dealt with in the YCDTOSA II section of this study: the first 1967 recording, a 1974 live version and the re-mix from 1984 with newly recorded bass and drums part. The current CD features the original 1967 recording, while the 1984 re-mix is available on the ZFT release "Lumpy money". See also the Ruben and the Jets section for these re-mixes

15. Lonely little girl

Zappa frequently sped up tapes for his CDs. Sometimes this conclusion can be derived directly: by speeding up a track arbitrarily, you can get at frequencies that are out of tune with keyboard frequencies. This is for instance happening on the current CD issue of "You are what you is". Sometimes the speed is thus going up, that it's getting to sound unnatural if humans were to play it like that. Quite obviously this is happening in "A vicious circle" from the next section of this study. In case of "Lonely little girl" Zappa sped up the tape, causing a transposition of exactly a minor third. In such instances you can only indirectly draw a conclusion that the pace has been changed, namely if you get the chance to listen to the original

track. This is the case for "Lonely little girl". The theme structure, chords and timing go as:

"We're only in it for the money" version:

- 0:00 Intro with an Ab-Ebm in Ab Mixolydian alternation, ending with C#-B.
- 0:10 Theme 1 with the Ab-Ebm alternation.
- 0:22 Theme 2 with Bbm-Eb-Cm-F, played twice.
- 0:32 Theme 3 with Gm-Ab.
- 0:40 Theme 4 with Cm-Bb-Fm-Eb.
- 0:44 Theme 5 with Gm7-C, ending with improvising over Gm.
- 1:08 End.

"Lumpy money", instrumental version on disc III:

- 0:00 Intro with an F-Cm in F Mixolydian alternation, ending with Bb-Ab.
- 0:11 Theme 1 with the F-Cm alternation.
- 0:22 Theme 2 with Gm-C-Am-D, played twice.
- 0:37 Theme 3 with Em-F.
- 0:47 Theme 4 with Am-G-Dm-C.
- 0:52 Theme 5 with Em7-A, ending with improvising over Em plus A, in the position B-E-G-A.
- 1:26 End.

The duration relationship can also be calculated. Speeding up a track to double-speed multiplies frequencies by 2 or an octave. With 12 minor seconds in an octave you get the 12th root of 2 = 1,05946 as multiplying factor per minor second. The transposition above is with a minor third or three times this multiplying factor. For the starting point of theme 5: $0,44 \cdot (1,05946)^3 = 0:52$. The end got lightly edited, so this doesn't go for the whole song.

16-17. Take your clothes off while you dance

Zappa first recorded "Take your clothes off while you dance" as an instrumental in 1961. An example is included in the Paul Buff section. This version is its first public release, this time with lyrics. Another instrumental version would appear as the closing track on the next album, "Lumpy gravy".

Verse 1

Am
There will come a time when everybody,
Who is lonely will be free, Bm
To sing and dance and love. Bsus2
Am
There will come a time when every evil,
That we know will be an evil, Bm
That we can rise above. Bsus2

Chorus 1

Cm
Who cares if hair is long or short,
Or sprayed or partly grayed,
G **Em**
We know that hair ain't where it's at,
Am
There will come a time when you won't
D7sus2 **G**
Even be ashamed if you are fat,
F# **F** **Em**
Wah, wah, wah, wah.

Take your clothes off while you dance (lyrics-chords samples).

Above are two small-format samples of the lyrics-chords from this song as published by Kobalt music, following the "We're only in it for the money version". It's pretty different from the original jazz type of playing it. Track 17 is the reprise of "What's the ugliest part of your body?", as mentioned above.

18 Mother people

Next is a fragment of the melody of "Mother people" with the chords progression I-IV-V-VI-IV-V-I in D written beneath it (what you hear on the album is yet another sped up track, a minor third higher). Notable is that for the bass Zappa lets the tonic D rapidly go down to C natural, a chromatic note. Something similar happens in bar one from "Who needs the peace corps" from above, where the tonic C is swiftly left for a Bb. Rhythmically the three presented bars offer three different forms in 3/4. The first bar is on beat. The second is syncopic between beats one and two. The third bar is 3/4 subdivided into 4.

Mother people, opening (the whole gets played twice). Source: songbook.

Most of the score of this song is available in the Frank Zappa songbook vol. I, pages 30-33:

- 0:00 Theme one as the instrumental opening from above.
- 0:09 Theme one with lyrics ("We are the other people ...").
- 0:19 Theme two, phrase one ("Do you think that ..."). Though notated as a bit faster, it sounds as going slower because the main time unit goes from an eighth note to a quarter note.
- 0:28 Theme two, phrase two, ending with three instrumental bars.
- 0:39 Theme three as shown below. The meter turns to 7/8, followed by 4/4. The two 7/8 bars aren't played literally like this on the album. Apart from the transposition with a minor third (as mentioned above), the chords from staff two got skipped. It makes the overall sound quite different. This theme

begins in A Dorian (transposed to C Dorian on the album), and ends like being in E Dorian. When you would include the Csus2 chord from the Songbook you're getting at an enlarged chord: Am by the bass plus Csus2 is Am11 in total. The two 4/4 bars are harmonized in the same manner.

The image shows a musical score for a song. It consists of two systems of music. The first system has a vocal line and a piano accompaniment. The vocal line has lyrics: "Lem-me take a min-ute and tell you my plan, Lem-me take a min-ute and tell who I am,". The piano accompaniment has a bass line and a treble line. Above the first system, there are guitar chord diagrams for C(susD), A, C(susD), and A. The second system also has a vocal line and piano accompaniment. The vocal line has lyrics: "If it does-n't show, Think you bet-ter know I'm an-oth-er per-son." Above the second system, there are guitar chord diagrams for F#m, Bm, F#m, Bm, G, A, and Em. The score is in 4/4 time and the key signature has one sharp (F#).

Mother people, theme 3 (Songbook version).

The image shows a musical score for 'Mother people, theme 3 (Songbook version)'. It consists of four staves: two for the vocal line (treble clef) and two for the piano accompaniment (treble and bass clef). The music is in 7/8 time and the key signature has two flats (Bb and Eb). The score shows a complex rhythmic pattern with many eighth and sixteenth notes.

Mother people, theme 3 (album version). Source: songbook, adapted to the album version by KS.

- 0:46 Theme two, phrase two.
- 0:57 Theme three. The Songbook has different lyrics for this repetition of theme 3: "Better look around before you say you don't care ...".
- 1:04 Theme one.
- 1:23 Theme two, both phrases.
- 1:39 Scratches.
- 1:42 Citation of "I don't know if I can go through this again". See the 2nd example from this track from the next section.
- 2:19 Theme three.

Coda

Do you think that I dream through the night of hold - ing you near me.

R. H.

L. H.

Mother people, coda (Songbook version).

- 2:25 End. While the album ends with theme three, the Songbook is using theme two, phrase two, as the coda (in a 3/4 meter). It's harmonized more intensively when compared to how this phrase two is played on the album. The Songbook is official material and the piano arrangements by Ian Underwood are often the way he played it himself when he was in the band. In both cases, finishing with theme 2 or 3, the song would end in E Dorian.

19 The chrome plated megaphone of destiny

With "The chrome plated megaphone of destiny" the idea of creating collages has resulted in a full-blown piece of 6:25 minutes. The CD leaflet contains an instruction by Zappa, that, because it's printed over a photo, is almost illegible. Only the head with a reference to Kafka's book *The penal colony* is clear. The track can be subdivided into a couple of sections with sound effects and modern atonal music. No additional players are credited on the album, so it must be the Mothers themselves playing all this:

- 0:00 Hiss.
- 0:02 Upcoming drone.
- 0:27 Three pianos.
- 1:11 High piccolo notes with flute, clarinet, mutated sounds and percussion.
- 2:48 Lower chords with sustained notes.
- 3:16 Mutated sounds and voices laughing.
- 4:37 Snare instruments with melodies and arpeggio-like strings.
- 5:34 Drone fading out.
- 6:25 End.

① Fast

Right

Middle

Left

Slower

⑤

Right

Middle

Left

First tempo

Slower

The chrome plated megaphone of destiny, 0:46-0:52. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague). As indicated in the main text, 3/4 is only my notational choice to make this specific section legible.

The above is a fragment from the piano section. It's made up of three, maybe four piano parts, divided over the left-, right- and middle-channel of the stereo field. It's played fast, so only six seconds already

take up a page with notes. My guess is that it's a directed improvisation. That is Zappa gave the outlines of what he wanted to hear and it got filled in on the spot during the recordings. Probably they are also edited tracks from various takes. The 3/4 meter in this example is only my notational choice. I used the high descant notes from staff two to give it a legible structure, but needed some tempo changes this way. It's atonal music with notes getting repeated in varying rhythms, next to smaller motifs.

No matter what you do

Included in the "'Tis the season to be Jelly" bootleg is a love song parody called "No matter what you do", that the Mothers played in 1967. This bootleg got an official status for its inclusion in the "Beat the boots" series. "No matter what you do" is a collage of textual and musical conventions. The exact origins of this song are a mystery. Everything on it sounds thus familiar that the chances that Zappa is arranging material here from his fifties single collection are a lot bigger than that he wrote the (entire) song himself. Halfway the booklet of "MOFO" there's a sheet with a "must record" songlist in Zappa's handwriting, where this song gets mentioned by its opening lyrics as "I could be a slave". There are various other titles on this list, that aren't on Zappa's official albums. One that now has become known via "MOFO" is "Groupie bang bang". This last song is a mix of material by Zappa and "Not fade away" by Petty and Hardin (best known via Bo Diddley and The Rolling Stones). The purposes of this sheet remain uncommented upon. "No matter what you do" is made up of three blocks:

- Opening lick ("No matter what you do") in Bb Mixolydian (more or less, the bootleggers tampered with the speed) with as progression I-II-VII. The riff surprises by its joyful impact. Zappa also used it for "All night long", a song on the "Animalism" album by The Animals, that he got credited for as arranger. Apparently he didn't consider himself the writer of that specific song. The origins of "All night long" are a mystery just as well, thus not bringing a solution any nearer. There are at least three popsongs with the same title. One by Johnny Otis, one by Joe Houston and one by Lionel Ritchie. None of these correspond to "All night long" on the "Animalism" album. Biographer Kevin Courrier states that "All night long" was written by Harris Woody, turned into a big hit by Chuck Higgins back in the fifties. It looks as if he's mixing things up. Harris Woody gets wrongly credited for "All night long" on the "For real" album by Ruben and the Jets (that's the one Joe Houston played). Zappa was indeed a fan of Chuck Higgins' biggest hit "Pachuko hop/Motorhead baby", but I couldn't find anything about an "All night long" by him.

No matter what you do, opening (Trad./ (Arr.) Zappa). Transcription: KS (update 2008, deposited at the I-depot, The Hague).

- Second theme ("I don't care how you treat me"). Though the music of "No matter what you do" is compartmented into three blocks, this is not the case with the lyrics. Regarding the text "No matter what you do" is consistent. The lyrics of the opening lick however would fit less into "All night long", where the

lick is played as an instrumental intermezzo. On "No matter what you do" the opening lyrics go as: "I could be a slave for the rest of my life, if only you could be my wife ... no matter what you do, can't hide my love for you". This is not specifically related to the text of "All night long", whereas in "No matter what you do" the follow up with "I don't care how you treat me" is quite logical. Then the question who is behind the music goes for the lyrics just the same.

- Third spoken block, that is using the slow theme from the 1st movement of Tschajkovky's 6th symphony in the background. The lyrics, with the "big tits" punch line, are undoubtedly Zappa. "I married Joan" is a reference to a fifties TV series, but the music from the title track from that series isn't used here.

LUMPY GRAVY - LUMPY MONEY: A COLLAGE

LUMPY GRAVY

In 1967 Zappa reached an agreement with a Capitol records agent Nick Venet to record some modern orchestral music. Nick had heard about Zappa's aspirations for producing modern music. For this occasion a 40 members orchestra was assembled, that Zappa called "The Abnuceals Emuukha electric symphony orchestra". Apart from the regular orchestral instruments, this orchestra also included electric guitars, bass guitar, extra percussion and drums. The chorus consisted of a range of people, who Zappa invited to talk about given subjects with their heads sticking inside a piano. The permanently open pedal made the conversations resonating. The texts are humoristic and bizarre, including the ultrashort inconsistency "I remember uh..., no I don't remember". Another conversation is between two people living in a drum. They are wondering what the world outside the drum might look like, but are afraid to actually look outside.

1. Part one

Oh no

The image displays a handwritten musical score for the piece "Oh no". The score is written in G major (one sharp) and 4/4 time. It consists of two systems, each with three staves. The top staff is the vocal line, the middle staff is the piano accompaniment, and the bottom staff is the double bass line. The music is characterized by a complex, multi-measure rhythmic structure, with time signatures changing from 4/4 to 3/4 and back to 4/4. Dynamics include mezzo-forte (mf), piano (P), and pianissimo (PP). The score includes various musical notations such as accents, slurs, and triplets. The piece is marked "Oh no" at the beginning of the first system.

The image displays two systems of handwritten musical notation for the main theme of "Oh no". Each system consists of three staves: a treble clef staff for the piano part, a bass clef staff for the bass part, and a grand staff for the double bass part. The key signature is E Dorian (one sharp, F#), and the time signature alternates between 4/4 and 3/4. The piano part features a melodic line with triplets and dynamic markings such as *p*, *pp*, and *p*. The bass part provides a rhythmic accompaniment with eighth and quarter notes. The double bass part is labeled "Eva bassa" and follows a similar rhythmic pattern. The notation includes various chord symbols and dynamic markings throughout the piece.

Oh no, main theme. Source: Songbook, Lumpy Gravy version accompaniment by KS.

"Lumpy Gravy" opens with two longer melodic pieces, "Duodenum" and, introduced by ten seconds of lounge music, "Oh no". Both are executed by the rock band members of the electric orchestra. Two examples from "Duodenum" are included in The mystery disc - projects section of this study. The entire score of "Oh no" can be found in the FZ Songbook vol. I, pages 57-59, the version with lyrics as you can hear theme on the later "Weasels ripped my flesh" album. In the example below I've adapted the piano arrangement of the accompaniment a bit to the "Lumpy Gravy" version. Several chords types are being used next to each other: triads, suspended chords and larger chords (Em9 for bar 1 in the Songbook, or maybe Em11 on "Lumpy Gravy"). Notable is also the use of altered notes during the last four bars from the example.

The "Oh no" main theme is made up of a 4/4 and 3/4 meter alternation. On several occasions triplets are used. So it's rhythmically an odd and flexible division. The main theme has something of E Dorian, so I've notated it here with F- and C sharp (the C sharp sometimes gets altered to C natural). Because of the changes in the middle of the song, the Songbook isn't using preset sharps. "Oh no" returns as index nr. 9 of "Lumpy gravy part one", where it is played by the full orchestra. The sound quality at this instance is low, so the strings don't have the rich timbre they normally have. According to Greg Russo (see below), Zappa obtained an inferior copy of the tape and the original one got lost, which might explain the lesser sound.

On most occasions however the orchestra doesn't play at full, sections of it are used for pieces that are more chamber music like.

It's from Kansas

"It's from Kansas" and "Bow tie daddy" from the We're only in it for the money section are in pre-war popular jazz style. The first is an instrumental played ultrafast, the other is in normal tempo. "It's from Kansas" sounds as a sped-up track, which was proven to be true in 2010, when the track in its original tempo got included in the Pal and Original sound archive releases.

The image shows a handwritten musical score for the piece "It's from Kansas". The score is written in 4/4 time and consists of three systems of music. Each system includes two staves for Viola (labeled "vva") and one staff for Bass (labeled "b"). The tempo is marked "As fast as possible" at the beginning. The first system includes dynamic markings of "mf" for the violas and "p" for the bass, and a section labeled "As bar 1". The second system includes a "p" dynamic marking for the first viola. The third system includes a "b" dynamic marking for the bass. The score features various musical notations such as triplets, sixteenth notes, and rests.

It's from Kansas. Transcription: KS (update 2007, deposited at the I-depot, The Hague).

I know too little about this kind of music to say some more about specific styles from this period. Technically the rhythm section is in 4/4 all through, mostly on beat. The other instruments are improvising

over the progression. The song has a basis in F Lydian, but keeps changing scales most of the time. In rock terms the chord progression is F-Db-F-D-Gm-D-Gm-Db-Abmaj7+5-F. In "Bow tie daddy" the sound via the mike of the singer is thus transformed that it imitates the sound of an old record played over the radio or via the speaker of a wind-up gramophone player. Something producers always do when simulating pre-war music.

Almost Chinese

"Lumpy gravy" also contains several musical styles that only get touched upon, as in "A bit of nostalgia" (raw blues) and "Almost Chinese" as presented below. There are a few more examples of so-called world music in Zappa's output. See the last paragraph from the Documentaries section for an overview.

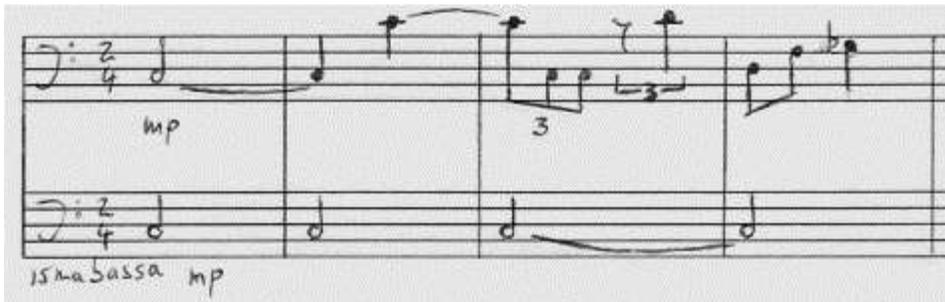


Lumpy gravy, Almost Chinese tune. Transcription: KS.

This one is only a miniature, on the corresponding album track embedded in experimental music and vocal comments. The progression is I-III-IV-III in C# Dorian, all chords without the third and played in the form of parallel fourths to get the Chinese cliché tune effect.

I don't know if I can go through this again

With "I don't know if I can go through this again" we get to the modern atonal music of the album, continued on "Lumpy gravy part II". It starts with a flute melody gently moving upwards and ultimately leading to sudden screaming high notes. Influences by Varèse and Stravinsky, who Zappa admired a lot, can be heard in instrumentation, rhythm and melody formation of the modern music on this album. To the right Zappa in the basement of his house during the eighties with a photo of Varèse on the shelves in the background. The first example below continues on record with several more bars with screaming dissonants.



Handwritten musical score for Isma Bassa. The score consists of three staves. The top staff is in treble clef, and the bottom two are in bass clef. The music includes a triplet in the first measure of the top staff. Dynamics include *mp*, *p*, *f*, *mf*, *pp*, and *ff*. There are also markings for *pp* and *ff* in the bass staff. The piece is titled "Isma Bassa" at the bottom left.

I don't know if I can go through this again, opening. Transcription: KS, by approximation (3rd printed edition, 2007).

Handwritten musical score with a tempo marking "Slower (♩ = d)". The score consists of seven staves. The top staff is in treble clef, and the bottom six are in bass clef. The key signature is two sharps (F# and C#) and the time signature is 4/4. Dynamics include *mf*, *pp*, *p*, and *mp*. There are also markings for *pp* and *ff* in the bass staff. The piece is titled "Slower (♩ = d)" at the top right.

The image shows a handwritten musical score for a section of a piece. The score is written on ten staves. The top two staves are in treble clef, and the bottom two are in bass clef. The key signature has two sharps (F# and C#). The music features various dynamics including *mf*, *f*, and *mp*. There are melodic lines in the upper staves and harmonic accompaniment in the lower staves, including a triplet in the third measure of the fourth staff.

I don't know if I can go through this again, section. Transcription: KS, by approximation (update 2009, deposited at the I-depot, The Hague).

After a short pause it continues with someone remarking "I don't know if I can go through this again". Then the opposite comes along in the second example from above. A peaceful miniature with sonorous harmonies, beautifully orchestrated. This fragment is diatonic, though unrelated to specific keys for a longer period (the bass keeps moving). It begins with just the Em chord, but soon winds up using extended chords. This second section is also used on "We're only in it for the money", but here it comes out much

more effectively because of its contrariness to the opening. I can't include a comment upon the meters and rhythm of this second section, because the transcription remains only a by approximation one regarding this aspect. It has no rhythm section underneath it, making it difficult to be positive transcribing it straight from record.

2. Part two

Unit 9 - A vicious circle

There are various examples in Zappa's output that show that he would every now and then speed up tracks. Speeding up a tape normally also means that you're modifying the frequencies upwards. When you're taking into account that these frequencies stay in tune with keyboard frequencies, the effect is a transposition of the tape and nobody can tell. Otherwise it remains detectable, as for instance for "Wild love" and the opening of "Heavenly bank account". Another clue for knowing if a track is sped up is that it is done thus radically that the speed and the registers of the instruments become unnatural. This is for instance the case for how "Unit 9" landed on "Lumpy gravy". "Lumpy money" includes "Unit 9" at its original speed. This short composition was skipped for the Capitol version, but it returned as the opening of "A vicious circle" on "Lumpy gravy". It's accelerated here to double frequency, thus in tune with regular frequencies. The tempo change however is thus drastic that it is obviously a sped up track. "Unit 9" appears to be a blend of prescribed and improvised parts. Its main motif is a chromatic movement of parallel thirds, played solo at the beginning. Halfway it has turned into some form of atonal frenzy, before this main motif returns again.

The image shows a handwritten musical score for the piece "Unit 9 - A vicious circle". The score is arranged in five staves, each labeled on the left with an instrument: Perc./Piano, C-Trumpet, Lead Brass, Bass, and Drumset. The music is written in treble clef and features a complex, multi-measure rhythmic structure. The time signature changes frequently, including 3/4, 2/4, and 3/4. The score includes various musical notations such as notes, rests, and dynamic markings like *mf* (mezzo-forte) and *pp* (pianissimo). There are also some handwritten annotations, including "ba" and "3-1" with arrows, and a "T" symbol. The overall appearance is that of a working draft or a transcription of a live performance.

The image shows a handwritten musical score for the opening of 'Unit 9/A vicious circle'. It is divided into two systems, each with six staves. The first system includes a piano accompaniment with various dynamics such as *pp*, *mp*, and *mf*, along with articulation marks like accents and slurs. The second system is specifically for the Flute, featuring complex melodic lines with triplets, slurs, and dynamic markings including *pp*, *mf*, and *inf*. The notation is dense and includes many accidentals and performance instructions.

Unit 9/A vicious circle, opening. Transcription: KS (update 2009, deposited at the I-depot, The Hague).
 For A vicious circle: transpose everything up an octave and play it unnaturally fast.

Drumset notation (bottom up): bass drum, snare drum, cymbal.

Note: the meters are my notational choice to get the repeating Db with F chord on the downbeat, as well as the start of the drumming.

"Lumpy money" brings to the light that "Lumpy gravy" not only was a collage in two different forms, with Zappa using a razor blade on all copies of the tapes. It was also composed in the shape of a series of smaller units and sections, rather than being an ongoing orchestral piece. The term unit stems directly from Zappa himself; you can hear the word being used during the recording sessions. So it's not a label put on some of the pieces later on by the ZFT. Four tracks on disc III of "Lumpy money" are indicated this way:

- Unit 2: the second theme for "Oh no" (the first is presented above).
- Unit 3A: a piece of chamber music (see also the two examples below).
- Section 8: a variant upon "King Kong", much longer than the actual "King Kong" on "Lumpy gravy" (also included below).
- Unit 9: another piece of chamber music, sped up for the album (idem).

The tableaux titles were thus added after the sessions, when Zappa was preparing the album sleeve. The first design for the Capitol sleeve is different from the MGM version in various ways. It had a little story on the inside, too vague to be legible in both the "Lumpy money" reproduction and the one in Greg Russo's book (it starts with the sentence "It has been raining all night" in the blow-up sample from the on-line version). You can also see a sample of the score as a backdrop for Zappa's portrait. The original MGM "Lumpy gravy" album at first also only used part I and II as titles instead of the various index titles on the CD, though my memory can be off here.

King Kong (1968)

The image shows a handwritten musical score for the piece "King Kong" (1968). The score is written on a system of staves with a key signature of one sharp (F#) and a 4/4 time signature. The score is divided into three main sections: Lead Brass, Base Brass, and Rhythm section. The Lead Brass section consists of two staves, with the top staff labeled "Lead Brass" and the bottom staff labeled "Base Brass". The Base Brass section consists of two staves, with the top staff labeled "Base Brass" and the bottom staff labeled "Bubassa". The Rhythm section consists of three staves, with the top staff labeled "Rhythm section" and the bottom two staves labeled "Rhythm section". The score includes various musical notations such as notes, rests, and dynamic markings. There are two measures marked with a box containing the number "1" and another measure marked with a box containing the number "5". The score is written in a clear, legible hand.

Rhythm section continues,
Base brass repeats bars 5 to 8

King Kong, Lumpy gravy. Transcription: KS (3rd printed edition, 2007).

Jazz passes by shortly in "Lumpy gravy part I", but halfway "part II" we arrive at a serious jazz statement with "King Kong". The jazz factor here lies in the fine brass arrangement, that will become full blown in the later jazz albums of 1972.

The composition is made up of several layers, which are playing in counterpoint movements. The bass part consists of a one bar bass guitar riff and two four bar brass movements. All get repeated throughout the song. In bar 8 the "King Kong" melody starts with rhythmic accents of its own. In bar 9 this melody is using 3/8 over the 4/4 of the accompaniment. The "King Kong" melody itself, as it appears on "Uncle meat" (without the 4/4 accompaniment), is notated in 3/8. So it's an example of using two meters simultaneously (see the Roxy and elsewhere section for an overview of such examples). Harmonically this piece is combining some traditional elements with unconventional movements. Much more about the "King Kong" melody can be found in the Uncle Meat section. The traditional element here lies in the rhythm guitar chords, being I and VII of A Mixolydian.

Kangaroos

The minute of modern orchestral music on "Kangaroos" (corresponding to "Let's eat out" on the Capitol version) was probably also one of the units, as pointed at above. The first larger theme of "Kangaroos" is made up of six variations upon two alternating bars in 5/4. It's entirely atonal and dissonant. The first bar is softer, chamber music like, while the second bar has a returning part for the violins with more volume. It moves forwards in the shape of waves, swelling and calming down again.

The image shows a handwritten musical score for the opening bars of 'Kangaroos'. It consists of ten staves. The first four staves are labeled 'As bar 2' on the right. The notation includes various dynamics such as p, mf, f, and mp, and includes accidentals like sharps and flats. The time signature is 5/4. The word 'Ova' is written at the top left of the first staff.

Kangaroos, opening bars (by approximation). Transcription: KS (update 2009, deposited at the I-depot, The Hague).

The example above shows the first four bars. Because of the dissonant atmosphere it's difficult to get the exact harmony for the string section in the picture, so I can't guarantee that element in the transcription to the full.

"Lumpy gravy" ends with "Take your clothes off while you dance", available in three versions in Zappa's catalogue. The 1961 version of "Take your clothes off while you dance" is included in Paul Buff section of this study. That one is the jazz version. The "Lumpy gravy" version is more pop-like. With the edition on "We're only in it for the money" this song has truly become a pop-song, this time including lyrics.

LUMPY MONEY

Foamy soak

Since "Lumpy gravy" was going to be a solo album instead of a Mothers of invention product, both Zappa and Capitol records presumed that they were free to produce the album, but MGM records thought differently. As soon as they noticed what was happening, they objected and bought the tapes from Capitol records. The release of "Lumpy gravy" was delayed for some months and the album appeared in 1968 as a normal contractual MGM album. What the original Capitol album would contain remained vague till "Lumpy money" got released. The scores of the Capitol version of "Lumpy gravy" can be rented via Schott Music. It's based upon a collection of Zappa's original handwritten scores, arranged by Andrew Digby. When Zappa regained the tapes he had already recorded material for three albums ahead and decided to rearrange things. Tracks from the "Lumpy gravy" sessions landed on "We're only in it for the money" and the below described Ed Seeman film. Newly recorded rock band pieces were added to "Lumpy gravy". Greg Russo presents the Capitol album cover in his "Cosmic debris" book, with the music subdivided into nine tableaux. In 2009 the ZFT has come out with a 3 CD set from the archives, entitled "Lumpy money", that includes a test pressing of the Capitol version in mono, indeed with the nine tableaux on it. This Capitol version contains some two minutes, that were skipped for the MGM album, being some percussion music and the following theme:

The image shows a handwritten musical score for the "Foamy soak" section. It is written in 7/8 time and consists of two systems of staves. The first system includes parts for Brass and Piano. The second system includes parts for Strings, Brass, and Various instruments. The score is annotated with various markings, including "Bar 2 repeats" and "Much slower First tempo". The notation includes treble and bass clefs, key signatures, and various rhythmic values and accidentals.

Foamy soak, section. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

This section returns in another form as the overture of what would become "The legend of the golden arches" on "Uncle Meat". It's in 7/8, just as "The legend of the golden arches", and has the character of an intro, so it looks as if it was composed with this purpose. It's made up of three shorter motif-like themes, that alternate each other. At one point they even mingle within a bar.

- bar 1: theme 1 with a two part counterpoint figure.
- bars 2-3: just the A chord, played as one-two-one-two-one-two-one.
- bars 4-7: a section for the strings. The bass keeps playing the I chord from F Mixolydian, over which the

descant is playing VI-IV-II-V-VII. When you take the harmony of these two combined, you can also see it as progression of enlarged chords: I and VI 7th alternating - IV 9th etc.

- bars 8-9: repetitions of sections of the previous themes.

- bar 10: variations upon the second half of bar 1 with the tempo hold back strongly for a short moment.

Zappa wrote the orchestral parts for "Lumpy gravy" under some time pressure in 11 days preceding the recording sessions, so it remains unclear why he chose to use only newly composed material. For instance he had "The legend of the golden arches" in stock since 1958 as the first movement of the so called string quartet. Another thing that's a bit strange is the relative shortness of "Lumpy gravy", specifically the Capitol version. At least the 2009 ZFT release "Lumpy Money" contains more from the Capitol sessions.

Unit 3a

"Lumpy Money" presents among others two different versions/mixes of "Lumpy Gravy", that Zappa has produced himself. The Capitol version, stemming from the spring of 1967, is taken over from a test acetate or tape. It's about all modern music, only some jazz comes along with it, and none of the later on added spoken parts. This way it's much more an orchestral work, a symphony or suite in nine movements. The disadvantage is that it is in mono. The other version dates from 1984, when Zappa was recording new bass and drum parts for three of his early albums. Other than for "We're only in it for the money", the new bass and drum don't replace the original parts all through. They are overdubbed on some locations, most parts are identical to the original. Here the effect is that it improves the sound quality and that it complements some of the spoken parts. For some reason the overall sound quality is also better than on the Rykodisc CD. Seen their reactions regarding "MOFO" and "We're only in it for the money", most Zappa fans will probably swear to the original vinyl version in this case as well.

The image shows a handwritten musical score for a piece in 4/4 time, consisting of four staves. The notation includes various notes, rests, and chord symbols. The first staff starts with a treble clef and a 4/4 time signature. The second staff begins with a treble clef and a 4/4 time signature, followed by a series of notes and rests. The third staff also starts with a treble clef and a 4/4 time signature, featuring a series of notes and rests. The fourth staff begins with a treble clef and a 4/4 time signature, showing notes and rests. The score is written in a clear, legible hand.

Handwritten musical score for Unit 3a, opening. The score is divided into two systems. The first system consists of six staves with various musical notations, including treble and bass clefs, a key signature of one sharp (F#), and time signatures of 2/4 and 4/4. The second system consists of five staves in 4/4 time, with dynamic markings such as 'f', 'mf', 'mp', and 'svabassa f'. The notation includes eighth notes, quarter notes, and rests, with some notes beamed together. There are also some handwritten annotations like 'Etc. (fill in)'.

Unit 3a, opening. Transcription: KS.
 Both sections: update 2009, deposited at the I-depot, The Hague.

A Little faster

The image shows a handwritten musical score for a piece titled "A Little faster". The score is written on ten staves, with the first seven staves containing the main body of the music and the last three staves showing a continuation or ending. The key signature is two sharps (F# and C#), and the time signature is 2/8. The notation includes various dynamics such as *mf* (mezzo-forte), *f* (forte), *fp* (fortissimo piano), *pp* (pianissimo), and *mp* (mezzo-piano). There are also accents and slurs used throughout the piece. The first staff begins with a treble clef and a key signature of two sharps. The second staff continues the melody. The third staff features a *fp* dynamic. The fourth staff shows a *pp* to *mp* dynamic range. The fifth staff has a *mf* dynamic. The sixth staff continues the melody. The seventh staff has a *mf* dynamic. The eighth staff shows a continuation of the melody. The ninth staff has a *mf* dynamic. The tenth staff shows a continuation of the melody. The eleventh staff has a *mf* dynamic. The twelfth staff has a *mf* dynamic. The thirteenth staff has a *mf* dynamic. The fourteenth staff has a *mf* dynamic. The fifteenth staff has a *mf* dynamic. The sixteenth staff has a *mf* dynamic. The seventeenth staff has a *mf* dynamic. The eighteenth staff has a *mf* dynamic. The nineteenth staff has a *mf* dynamic. The twentieth staff has a *mf* dynamic. The twenty-first staff has a *mf* dynamic. The twenty-second staff has a *mf* dynamic. The twenty-third staff has a *mf* dynamic. The twenty-fourth staff has a *mf* dynamic. The twenty-fifth staff has a *mf* dynamic. The twenty-sixth staff has a *mf* dynamic. The twenty-seventh staff has a *mf* dynamic. The twenty-eighth staff has a *mf* dynamic. The twenty-ninth staff has a *mf* dynamic. The thirtieth staff has a *mf* dynamic. The thirty-first staff has a *mf* dynamic. The thirty-second staff has a *mf* dynamic. The thirty-third staff has a *mf* dynamic. The thirty-fourth staff has a *mf* dynamic. The thirty-fifth staff has a *mf* dynamic. The thirty-sixth staff has a *mf* dynamic. The thirty-seventh staff has a *mf* dynamic. The thirty-eighth staff has a *mf* dynamic. The thirty-ninth staff has a *mf* dynamic. The fortieth staff has a *mf* dynamic. The forty-first staff has a *mf* dynamic. The forty-second staff has a *mf* dynamic. The forty-third staff has a *mf* dynamic. The forty-fourth staff has a *mf* dynamic. The forty-fifth staff has a *mf* dynamic. The forty-sixth staff has a *mf* dynamic. The forty-seventh staff has a *mf* dynamic. The forty-eighth staff has a *mf* dynamic. The forty-ninth staff has a *mf* dynamic. The fiftieth staff has a *mf* dynamic. The fifty-first staff has a *mf* dynamic. The fifty-second staff has a *mf* dynamic. The fifty-third staff has a *mf* dynamic. The fifty-fourth staff has a *mf* dynamic. The fifty-fifth staff has a *mf* dynamic. The fifty-sixth staff has a *mf* dynamic. The fifty-seventh staff has a *mf* dynamic. The fifty-eighth staff has a *mf* dynamic. The fifty-ninth staff has a *mf* dynamic. The sixtieth staff has a *mf* dynamic. The sixty-first staff has a *mf* dynamic. The sixty-second staff has a *mf* dynamic. The sixty-third staff has a *mf* dynamic. The sixty-fourth staff has a *mf* dynamic. The sixty-fifth staff has a *mf* dynamic. The sixty-sixth staff has a *mf* dynamic. The sixty-seventh staff has a *mf* dynamic. The sixty-eighth staff has a *mf* dynamic. The sixty-ninth staff has a *mf* dynamic. The seventieth staff has a *mf* dynamic. The seventy-first staff has a *mf* dynamic. The seventy-second staff has a *mf* dynamic. The seventy-third staff has a *mf* dynamic. The seventy-fourth staff has a *mf* dynamic. The seventy-fifth staff has a *mf* dynamic. The seventy-sixth staff has a *mf* dynamic. The seventy-seventh staff has a *mf* dynamic. The seventy-eighth staff has a *mf* dynamic. The seventy-ninth staff has a *mf* dynamic. The eightieth staff has a *mf* dynamic. The eighty-first staff has a *mf* dynamic. The eighty-second staff has a *mf* dynamic. The eighty-third staff has a *mf* dynamic. The eighty-fourth staff has a *mf* dynamic. The eighty-fifth staff has a *mf* dynamic. The eighty-sixth staff has a *mf* dynamic. The eighty-seventh staff has a *mf* dynamic. The eighty-eighth staff has a *mf* dynamic. The eighty-ninth staff has a *mf* dynamic. The ninetieth staff has a *mf* dynamic. The ninety-first staff has a *mf* dynamic. The ninety-second staff has a *mf* dynamic. The ninety-third staff has a *mf* dynamic. The ninety-fourth staff has a *mf* dynamic. The ninety-fifth staff has a *mf* dynamic. The ninety-sixth staff has a *mf* dynamic. The ninety-seventh staff has a *mf* dynamic. The ninety-eighth staff has a *mf* dynamic. The ninety-ninth staff has a *mf* dynamic. The hundredth staff has a *mf* dynamic.

Unit 3a, section. Transcription: KS.

The first example could have served as the opening for the album, but only the last two bars were actually

used. This opening returns in a different form in "How did that get in there?". It's a slow sequence of chords, with various arpeggio figures and note strings in it to enrich the score.

- bars 1-4: a progression of I 7th - V 9th - I 7th - VII - II in E Dorian.

- bars 5-8: from the second half of bar 4 onwards the scales start to drift, the chord progression in rock terms being F (all of bars 5-6)-Em-Em7-A.

- bars 9-10: the piece continues melodically and with the final chord we get back at E Dorian.

The second example is a mixture of smaller phrases and sustained notes in all kind of combinations.

About all notes belong to the same key and the minor second is avoided, so that it sounds friendly. This little block is related to the second example above from "I don't know if I can go through this again".

To the right a still from the Ed Seeman film "Frank Zappa and the original Mothers of Invention 1967-1969", featuring Ian Underwood, Don Preston and FZ in front of Buckingham Palace, London. Frank is wearing a bolded hat and short pants, as also visible on the inside photo from the "Hot rats" album. Ed filmed the Mothers for two years and edited a 40 minute "psychedelic" version from the footage. It's mostly in a collage form with dimmed coloured lights. All was filmed without sound. Zappa worked for a while with Ed for the intended Uncle Meat movie and gave him permission to use music from the albums to finish his documentary. For long it contained the above "Foamy soaky" part solely, as a curiosity, starting at 16:18 in Ed's film.

How did that get in here?

Disc III of "Lumpy Money" includes over half an hour of largely unreleased tracks and variations upon themes from "Lumpy Gravy". "How did that get in here?" is the first "Oh no" recording with some 20 minutes of directed and free jazz improvisations in it. Only some snippets from the improvisations landed on the album. Personally I find it useful material. With further editing, bringing the total length back from 25 to say 15-20 minutes, it wouldn't have been misplaced in Zappa's own catalogue. "Unit 3A" went mostly unused. The structure of "How did that get in here?" goes as:

0:00 Like above, "Unit 3a", bars 1-8.

0:24 Idem, bars 9-10.

0:32 Lounge music interlude, a figure repeated and varied upon more often than on "Lumpy Gravy".

1:12 "Unit 3a", bars 1-8, some more.

1:33 Idem, bars 9-10.

1:41 Vamp #1, played just like that.

1:56 "Oh no", like above.

3:20 "Oh no" postlude #1.

4:18 Vamp #2.

4:23 Vamp #3 in D Dorian, now with improvisations.

5:57 Vamp #4 in E Phrygian, a bit like "Help, I'm a rock". This block starts off with a composed theme, followed by improvisations.

9:15 Variations upon bars 9-10 from "Unit 3a", ending with vamp #2.

9:30 Vamp #3 returns.

12:32 Composed atonal section.

13:03 Free jazz. 15:33 through 15:53 was used for "Lumpy Gravy".

18:20 Drumset figure in 4/4, followed by some more improvisations and other figures.

19:28 Atonal section, partly used for "Lumpy Gravy".

20:22 Another atonal section, beginning with a motif from "Unit 9" (bars 1-4 from above).

21:04 Composed figures. The following example contains 21:27 through 21:47. All is atonal. The first figure of two bars in 4/4 gets played five times on the CD. It has a chromatic bass line F#-A-F#-F natural. Staff four contains alternating notes, D#-E or Bb. The other parts are improvising. The second figure in 6/4 appears twice. It's played much faster, almost at double speed. Notable are its rhythmic variation and the dissonance between staves two and three.

1 13:8

8va b.

4 Much faster

(cresc., tremolo)

8va b.

How did that get in here?, section. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

21:57 Vamp #2 returns.

22:00 "Oh no" variations and postlude #2.

24:40 Coda.

24:58 End.

CRUISING WITH RUBEN AND THE JETS - GREASY LOVE SONGS: DOO-WOP

In 1968 released "Cruising with Ruben and the Jets" as a homage to a fifties vocal love songs style, that by then had become known as doo-wop. These songs are characterized by their simplicity and the appliance of vocal harmonies, using meaningless syllables as "doo wop". Below it's for instance "bap doo way bap" in "No. No. No". Half of the songs on "Cruising with Ruben and the Jets" are outspoken simple. The other half is more elaborate, like the four ones that are returning from "Freak out!". All songs are now treated with vocal harmonies and an explicit easy accompaniment. They all deal with a juvenile love world following commonplaces.

When Zappa took an anti-love song stand in the seventies, bored by their clichés and insincerity, and with his productions becoming ever more sophisticated, "Cruising with Ruben and the Jets" turned into an oddity within his repertoire. In the Real Frank Zappa book he gave it a twist by saying that the album was a parody with submoran lyrics. One can't prove this interpretation to be wrong. There's nothing on the album, however, that supports the idea of a parody and the phrase "we really love these songs" in the liner notes rather points into the opposite direction. For a readily recognizable parody effect you need some context that makes something come out as a joke in an otherwise serious environment. Within Zappa's oeuvre you could say that, but not for the album as such. Today "Cruising with Ruben and the Jets" offers a nice exception upon the mostly cynical lyrics and the rather plastic and emotionless way in which he describes sex. It shows how far his conceptual continuity could stretch, regarding both the music and the lyrics. To the right an outtake from the album cover drawing by Cal Schenkel featuring the imaginary Ruben & the Jets band with Zappa as his alter ego Ruben Sano, standing in front as the band's lead guitar player.

1. Cheap thrills

"Cheap thrills" and "Anything" are two examples with continually repeated easy progressions. After the intro, the first song follows I-IV-I 7th-IV-I etc. in A Mixolydian from bar 9 onwards.

The intro from "Cheap thrills" stands by itself. It shows a progression in E Mixolydian, with the E as tonic only confirmed at the end in bar 8. During bars 1-7 the bass keeps moving as part of the chord progression, being A-AM7-F#m-D-E-A-AM7-F#m-A-D-E. The bass line in this example is the newly recorded bass part from 1984 (see also below at "No. No. No").

Cheap thrills (1984 version for the CD re-release). Transcription: KS (3rd printed edition 2007).

2. Love of my life

Zappa first recorded "Love of my life" as a single in 1963. It's included as a bonus in the "Greasy love songs" CD by the ZFT. "Cruising with Ruben and the Jets" contains the easy doo-wop version of this song. The opening of the later "Tinsel town rebellion" version of "Love of my life" is included in the Cucamonga section of this study. This time it's mainstream pop with much more parts and details added to it. Charming is also the Mud club version from "YCDTOSA Vol. IV". See the Cucamonga section from this study for descriptions.

3. How could I be such a fool (1968)

Zappa re-recorded four songs from "Freak out!" again for "Cruising with Ruben and the Jets" in pretty different doo-wop arrangements. In case of "How could I be such a fool" there are four versions in total.

a) The score of the complete song is available in the Frank Zappa songbook vol. I, pages 45-49. A sample from this score of "How could I be such a fool (1966)" is present in the Freak out section from this study.

b) As discussed in the Freak out section at "I'm not satisfied", these scores are arrangements for piano. Compared to the album recording, they have the rhythm of the lead melody and the chords in common. But regarding details they can be different in many aspects. For recording "Freak out!", Zappa had a budget at his disposal that allowed him to hire additional session musicians. They play the various acoustic instruments that you can hear on the album, the instruments as used in orchestras. When he had the opportunity to involve extra musicians, Zappa avoided simply doubling parts only. This topic is coming by in the Them or us section from this study. As you can see in the example from below, the number of musicians led to the creation of broader chords, with notes spread out over a couple of octaves. This is an approach much different from when people like James Last or André Rieu orchestrate pop songs. They let more instruments play the same notes, letting the result remain the same as the original.

The image shows a handwritten musical score for piano, consisting of seven staves. The key signature is one sharp (F#) and the time signature is 3/4. The score is divided into four measures. The first measure is marked with a first ending bracket and a repeat sign. The vocal line (second staff) begins with the lyrics "How could I be taken in by you, ...". The piano accompaniment features wide intervals and complex chordal textures, with some staves containing notes spread over two octaves. The word "Repeats" is written in the third measure of the second and seventh staves. The score includes various musical notations such as slurs, accents, and dynamic markings like "mf".

16

As bars

Repeats

8va

17

Retardando --- First tempo

8va

But there will come a time,

8va

8vb

Previous pages: How could I be such a fool (1966), main theme. Transcription: KS, with basic material taken over from the Frank Zappa songbook vol. I.

"How could I be such a fool" knows three themes, as briefly indicated in the Freak out section. Here I'm dealing with three different appearances of the third theme, the main theme or chorus.

- bars 1-4: this phrase from the main theme is played three times with little variations, caused by the lyrics. The example above begins with the last repetition. At this point the song is in E minor or Dorian (the C/C#, that makes the difference, isn't played). The chord is E-G-B-D-F#-A or I 11th, an example of the applying enlarged chords. When you compare this literal transcription from the album with the Songbook, you can see that the rhythms of the sung melody overlap, but the pitches are mostly different. Moreover it's sung by two people on the album, not singing the same notes. The chords are largely the same, but their positioning is also different.

- bars 5-8: second phrase in F major or Lydian (now the B/Bb isn't coming by). The sustained chord is F-E-G-A-C or I 9th.

- bars 9-10: third phrase in Ab major or Lydian. The sustained chord is Ab-G-Eb-C, being I 7th or Abmaj7.

- bars 11-12: fourth phrase in G Mixolydian. This time the chord is G-F-C-D or G7. Bar 12 is played crescendo and retardando with G-D.

- bar 13: return to the opening theme in C.

As you can see here and in the Songbook, the song keeps modulating all the time.

Handwritten musical score for "How could I be such a fool". The score is written on six staves. The top staff is a grand staff with treble and bass clefs. The second staff is a bass line with triplets and slurs. The third staff is a vocal line with lyrics: "How could I be ---, be ---". The fourth staff is another vocal line with lyrics: "How could I be ---, be ---". The fifth staff is a bass line with triplets and slurs. The sixth staff is a grand staff with treble and bass clefs. The score is marked with a key signature of one sharp (F#) and a 4/4 time signature. There are various musical notations including slurs, triplets, and dynamic markings like "cresc." and "retard.".

How could I be such a fool (1968), part of the main theme. Transcription: KS.

c) The version of the main theme from "Cruising with Ruben and the Jets" is something that some people refer to as a character variation. Not the melody is getting varied upon, but only some characteristics of the theme are taken over. In this case the correspondence of the number of bars, related to the lyrics, and the modulation scheme. It's the type of variation that you can find in The Goldberg variations by Bach or the Diabelli variations by Beethoven. The art of variation is common practice in classical music, both mostly gone down under in pop music. Most songs have two themes repeated a couple of times and, after some four minutes, the next song begins. Zappa can vary his themes. A classic example is "Strictly genteel" with some note examples being present in this study. Most persistently, Zappa varied between different recordings of the same title. See also the YCDTOSA II section from this study.

The differences with the previous example are many. Just to mention some:

- The meter has changed from 3/4 to 4/4.
- For the doo-wop harmonies you've got a group of people singing "how could I be, be such a fool", over which the lead melody is sung.
- The sustained chords are gone. Instead you can hear bass pedal notes with instruments playing little individual melodies over them.
- The bass pedal note during bars 5-6 is C instead of F. It's still using the same set of notes, thus the outlines of the modulation scheme are basically kept. It lets the key switch to C Mixolydian or major.

d) A live version from this song can be found on the ZFT release FZ:OZ. It's from 1976 with Napoleon Murphy Brock doing the lead vocals. Again the song is performed differently.

How could I be such a fool (1976), main theme. Transcription: KS.

Phrase one of the main theme can be called another character variation. It's a duet between the vocal part and a bass/guitar riff of two bars. This riff is melodic, not accompanied by chords, nor does it follow a clear progression by itself. Rhythmically it might be called disco. Specifically bar two of the riff contains the four-on-the-floor drumbeats, typical of disco (indicated in the transcription). The song in its entirety isn't disco, just these bars. See the Sheik Yerbouti section for other examples of such instances. This time the key can positively be identified as E Dorian, for in bar 9 Napoleon is singing a C#. To the left: audience clapping at Indeep, Last night a dee-jay saved my life, around 1978, when disco was at its heights.

4-5. Deseri - I'm not satisfied

The emotions about being in love and broken hearts are quite recognizable in a number of examples from "Cruising with Ruben and the Jets". "Deseri" is a Collins/Buff contribution for this album. It's joyful, like "Jelly roll gum drop", while "You didn't try to call me" is melancholic. More on this topic in the Joe's garage section.

Deseri, 0:22 till 0:30. Transcription: KS.

Deseri was composed by Paul Buff and Ray Collins, with who Zappa worked with for some years from 1963 onwards.

The opening of the "Freak out!" version of "I'm not satisfied" can be found in the corresponding section from this study. The "Cruising with Ruben and the Jets" version is much different. It has an instrumental opening of its own. Phrase one from the opening theme contains the only two bars from the example in this study, that overlap in their general outlines. These are bars 9-10 with "got no place to go". Phrase two got replaced by a new doo-wop figure, that keeps returning throughout the song.

6. Jelly roll gum drop

Zappa's love of fifties doo-wop songs resulted in a huge collection of singles from this era, that he kept with him his whole life. Every now and then he would include a doo-wop classic in his concert repertoire. "You can't do that on stage anymore, vol. IV" ends with a series of covers, while "Them or us" (1984) opens with "The closer you are".

Jelly roll gum drop. Transcription: KS (3rd printed edition, 2007).

"Jelly roll gum drop" is in A Mixolydian with the following chord progression: I-VII-I-VII-I-II-III-IV-V-IV-III-II-V-I. In bars 7-12 the melody forms a sequence, going upwards in bars 7-11 and back again from bar 12 onwards, each time moving with a second. Bar 13, with an E instead of C#, first breaks the literal pattern. Notable is the fact that in most bars the movement from beat 4 to beat 1 in the following bar is syncopic. Left: part from the album instructions for how to comb a jelly roll.

7-8. Anything - Later that night

Like "Cheap thrills", "Anything" mostly follows a repeated progression: I-II-III-II-I etc. in C. This song is another Ray Collins song for the album. Ray is also credited for doing the lead vocals. 1968 would be the last year of him working with Zappa. Not at ease with the directions Zappa was taking, he preferred to live in anonymity ever since.



Anything, accompanying figure. Transcription: KS/W. Ludwig.
 Anything is a Ray Collins contribution to the Cruising with Ruben and the Jets album.



Anything, section. Transcription: W. Ludwig.

On page 170 of his study Ludwig is referring to the doo-wop arrangement of this song on "Cruising with Ruben and the Jets" by transcribing the "la-la-la" vocal parts of the third phrase. There's also a nice little sax solo in the middle of this song.

"Later that night" is in A. It's built around a I-VI alternation for its first theme, a IV-V alternation for its second theme and a II-III-IV-V progression for its third theme.

9. You didn't try to call me

"You didn't try to call me" is also present on "Freak out!" from 1966. First the outlines of this 1966 version:

- 0:00 Instrumental intro of four bars in G. The descant is using the V and I chords. The bass notes aren't part of these two chords, so the total sounding harmony is bigger. For these four bars these total harmonies are I 9th for bars 1-3, and a G7 chord during bar 4, involving the F as natural.
- 0:08 Theme one ("you didn't try to call me ..."). Bars 4-7 from the first example below (by me and Ludwig jointly), continuing in G. Notable is the strong syncop between bars 5 and 6.
- 0:16 Theme two ("no matter who ..."). Bars 8-14 from the example (Ludwig continuing with the lead melody).
- 0:29 Theme three ("tell me, tell me ..."). Bars 15-21, modulating to E.

1

1
You did-n't try-to -

5

5

You didn't try to call me (1966), 0:00-0:16. Transcription: W. Ludwig/KS.

6
You didn't try to call me why
did'n' ya try, did'n' ya try did'u' you know (2) was lone-ly no mat-ter

9
you I take home - I keep on call-in' your name- and you - I need you so bad -

13
you're the one - babe - Tell me tell-me who's lov-in' you now - 'cause it

17
wor-ries my mind - and I can't sleep at all - I stayed home-on - Fri-day just to

20
wait for your call - and you didn't try to call me ...

You didn't try to call me (1966), themes 1-3. Transcription: W. Ludwig.

- 0:45 Variation upon theme one, continuing in E. Here the example has stopped.
- 0:52 Theme two with the instrumentation being supplemented by the acoustic session players.
- 1:05 Theme three returns.
- 1:21 Theme four ("I can't say what's wrong or what's right ...").
- 1:37 Theme five ("you make me feel so excited ...").
- 2:02 The intro returns.
- 2:11 Theme one, being used as the coda. The atmosphere shifts from sorrow to frustration and anger.
- 3:17 End.

On "Cruising with Ruben and the Jets" theme three re-appears in quite a different shape compared to the "Freak out!" version. The second transcribed section below is this theme three in the form it got in 1968. It's in A Mixolydian, containing the progression I-VII-II-I-VII-II-I-VII. The first staff contains the lead melody, whereas the second staff represents the doo-wop vocals.

The image shows a handwritten musical score for "Cruising with Ruben and the Jets" in A Mixolydian. It consists of two systems of three staves each. The top staff is the lead melody (treble clef), the middle staff is doo-wop vocals (bass clef), and the bottom staff is chords. The first system has lyrics "I can't say what's wrong or what's right." and chords A, G, Bm, A, A. The second system has lyrics "All..." and chords G, Bm, A, A, G. There are handwritten notes like "Pa-hoo, etc." and "mbassa" throughout the score.

You didn't try to call me (1968), 1:53 till 2:16. Transcription: KS (3rd printed edition, 2007).

Live recordings are present on "YCDTOSA Vol. II" and the ZFT release "Philly '76", featuring Bianca Odin (aka. Bianca Thornton) as lead singer. To the right a picture of her as shown in the CD leaflet (part of a photo by Alan Smithee and John Rudiak). In the liner notes of this CD she comments about her cooperation with Zappa: "I didn't know anything about this kind of music. I was two steps past the conservative community - the Holy Rollers (especially my parents). I decided I would sing with all my might and play piano so he would hire me. Yep. And he did, and that was the beginning of my apprenticeship with a genius. It was better not to try to figure out his music - just do the part he wanted in that spot. But my singing was my instrument and I was gonna use it to the best of my ability."

1

Lord —

3

6

Di-dn't try to call me.

8va b.

You didn't try to call me (1976), 3:59-4:24. Transcription: KS (update Winter 2019, deposited at the I-depot, The Hague).

Indeed Bianca is doing a fine job here, singing intensely as she's also showing off during "Black napkins". The third example above is played between 3:59 through 4:24, containing part of the 1976 variant upon theme five and the coda. In the pick-up bar and bars 1-3 you can see embellishments as glissandos, tremolos and chromatic passing notes. Harmonically bars 1-6 are a sequence of parallel major triads: C#-E-D-E-D-G-D-E. This is a feature happening more often in Zappa's music, also been addressed to in the Freak out and YCDTOSA Vol. II sections of this study. Bars 1-2 are in C# Mixolydian, bar 3 in E Mixolydian. Bars 4-5 are just the chords. The last quarter notes on beat 4 from bar 5 get sustained, fluctuating a bit. Bar 6 serves as a pick-up bar to restart the meter. Bars 7-8 are the vamp for the outro. Here the music becomes stable in A Mixolydian, using a I-VII alternation. Bianca continues: "I didn't realize how much this experience would stay with me when I began forming my own band and styling my own career. It gave me strength and tools to handle this music business through the years."

10. Fountain of love

"Fountain of love" goes back to 1963 with a recording from that year to be found on "The lost episodes". It only has Zappa himself on instruments (some overdubbed) and Ray Collins on vocals. Paul Buff comments in the liner notes: "Ray had a lot of talent, and these kinds of songs are what we did a lot of in Pal, and eventually (Frank did) in Studio Z. Almost all of these songs were done to be hit singles. They got recorded, we went up to Hollywood together and tried to place things with record companies. Sometimes we succeeded, sometimes we didn't." See the Cucamonga years section of this study for an overview of the singles that actually got released.

11. "No. No. No."

When Zappa got the mastertapes of his records back in 1982, after a couple of years of litigation, he decided to record the bass and drums anew for "We're only in it for the money" and "Cruising with Ruben and the Jets". Arthur Barrow (bass) and Ched Wackerman (drums) did the new parts in 1983 or 1984. The argument was either that he didn't like the old version or that he was forced to do so, because the tapes were in a bad condition. Other usable tapes existed: the second CD release of "We're only in it for the money" restored the original version, after lot of complaints from the fans. The 1984 remix is today available via "Lumpy money". Technically Zappa didn't literally replace the old bass and drum. He overdubbed the new parts and then remixed the whole anew. In most cases the old bass and drums were victimized in the remix in favour of the new ones. In the case of "We're only in it for the money" the new bass was placed into the foreground. It makes the sound of that new mix awkward. You've got an eighties bass dominating over sixties instruments. When you turn the bass down and the treble up however, the two versions tend to approach each other. Both bass parts are standard accompaniment with the bass mostly following the lead melody instead of playing motifs of its own. In the case of "Cruising with Ruben and the Jets" the character of the album changed. The original album sought for simplicity in every manner. Not only via the construction of the songs, but also via the arrangements. You've got repetitive triplet piano chords all along (if you are notating in 4/4) as well as a very simple drum part. This drum part was given a mechanical repetitiveness via tape loops. Other than for "We're only in it for the money", Zappa kept more of the original tracks in the remix of "Cruising with Ruben and the Jets". In some cases original unused tracks turn up again in the mix. In "No. No. No." you've got the replacement type of a remix. The original bass and drums are gone to make room for the new ones. The other parts are hardly remixed.

Doo-wop vocals [1]

The score is divided into two main sections: "Doo-wop vocals" and "Lead vocals".

1984 Version:

- Vocal:** "Bap doo wop ---" (mf)
- Piano:** Repeats (f), Repeats (mp)
- Drum:** mf, mp

1968 Version:

- Vocal:** Like bar 1
- Piano:** Etc.
- Drum:** mf

Lead vocals:

- 1984:** "No, no, no ---" (mf), As bar 4
- 1968:** Keeps repeating literally via a tape loop

Annotations include "All other staves from bar 3 keep repeating" and "Like bar 1".

"No. No. No.", opening. Transcription: KS (update 2011, deposited at the I-depot, The Hague).
 Notation for the drum part (bottom up): bass drum, tom 1 and 2, snare drum, high hat closed, cymbal.

After the pick-up bar "No. No. No." begins in staff 2 with ticking a fifth rapidly. The harmony of the whole in this bar is I 7th in Bb Mixolydian. The bass of the 1968 version simply plays the Bb as a pedal note, whereas the 1984 version makes a movement. The chord progression of the accompaniment from bar 3 onwards is I-IV-I 7th-IV-I, the same one as in "Cheap thrills". Over this the doo-wop harmony does a I-

II alternation in the shape of parallel fourths. In bar 5 the lead melody enters with I-II-III (D altered to Db, giving it shortly a scent of Bb Dorian)-II-III-II-I (with D natural again). In both versions the bass makes a movement through Bb Mixolydian, going from Bb to Bb an octave upwards. So the whole becomes a harmonic blending of the notes of the scale. Though "No, no, no" is a single-theme song, it sounds interesting enough to keep it going for over two minutes.

12. Anyway the wind blows

The earliest 1963 version of "Any way the wind blows" gets dealt with in the Paul Buff section. On "Cruising with Ruben and the Jets", this title gets consistently spelled with "anyway" instead of "any way", on the tracklist as well as the printed lyrics. Both are possible in English, but their meaning can be different. "Any way" is in any manner, "anyway" rather means in any circumstances. Since the lyrics are kept the same, in this context it still means the first.

13. Stuff up the cracks

Next is a section from "Stuff up the cracks" in both the original and re-recorded/re-mixed versions. The bass part is identical for every single note, so this is the original bass unaltered in both mixes. The drum part contains all the beats of the original part with additional ticking on the cymbal and the high hat. The new mix has the drum part in stereo and sounds richer, whereas the old one has all on one channel. So the remix is probably a combination of the original track plus an overdubbed track. The piano chords are mixed to the background. The sax part was mixed out for most of the 1968 version, where it appeared only in bar 8. In the new mix the sax was given a second live and plays through all bars. So the deliberate simplicity of the arrangement was partially undone in the new mix. Both mixes are valid. The new one has more to it, the original one is more consistent in its goal. With the old mix re-released by the ZFT as "Greasy love songs", no one can complain no more.

Lead vocals I

mf If you de-cide--
Doo-Vop vocals

mf Ah--

Keyboard
P
Sax Bra-→

Pattern continues
Chords:
F G F C G

1968-84

Drumset
mf
Bass
mf

mp

mf

mp

1968

Drumset
mf
Bass
mf

Keeps repeating
literally via a tape loop

1968 Mix: Keyboard mf, sax not present till bar 7

14

1968-84

mp *mf*

F C G F C G Bb

mf

Etc.

Etc., identical to the 1968 bass staff

mf

1968

Bar 4 repeats

Handwritten musical transcription for "Stuff up the cracks" by Frank Zappa. The score is divided into two sections: 1968-84 and 1966. The 1968-84 section includes staves for guitar (G, Em, Am, Em), bass, and drums. The 1966 section includes staves for guitar and bass. Annotations include "1968 Mix: Sax enters up at point 1)" and "Sax mf at point 2)". The drum part is notated with "+" for bass drum, "x" for snare, and "o" for cymbal.

Stuff up the cracks, section. Transcription: KS (update 2011, deposited at the I-depot, The Hague).
 Notation for the drum part (bottom up): bass drum, tom 1 and 2, snare drum, high hat closed, cymbal.
 Note: the 8 va for the sax stems from the fact that I misheard this part for an octave at first.

"Stuff up the cracks" begins in C with the chords as indicated in the transcription. In bar 6 a short sidestep to Bb Mixolydian is made, immediately to go back again to chords from the scale of C from bar 7 onwards. It's the only song on this album with Zappa doing a guitar solo. One of the extras on "Greasy love songs" is a longer edit of this solo.

Oh, in the sky - If only I could be your love again

Though Zappa said he could easily write another album like "Cruising with Ruben and the Jets", he seldom returned to writing doo-wop songs again. He included fifties songs in about every tour, but they could be existing songs by himself or covers. In 2012 the ZFT released "Road tapes", with a concert from

1968. It includes one doo-wop track not released by Zappa himself, called "Oh, in the sky". Apparently Zappa never fully worked this song out, because it hardly has lyrics. It is sung by Roy Estrada with a falsetto voice, with the same intonation for his voice that he used in pieces as "Right there". So it sounds a bit awkward on this CD, but the midi file (on-line version) sounds cute. The song is made up of two themes. The first theme is in G. It starts with a repeated instrumental bar, simply the I chord in a 12/8 meter. The theme itself is sung over the progression following G-Am-D. Bars 9-10 make the transition to theme two. This second theme doesn't follow a particular scale. It's a chord progression gliding through a number of different scales. The progression itself is C-Cm-G-Gb-G-Bm. Roy sings the theme with some rubato and several embellishments (mostly tremolos), so when you transcribe it literally you get figures as at the beginning of bar 14.

The image shows a handwritten musical score for the song "Oh, in the sky" in G major, 12/8 time. The score is divided into two systems. The first system contains measures 1-4, and the second system contains measures 5-8. The score includes vocal lines with lyrics "Oh in the sky", guitar accompaniment with dynamics like "mf" and "p", and bass lines. Chord progressions are noted as G, Am, D, and Cm. There are also notes about repeating patterns and specific rhythmic figures like "r-3".

System 1 (Measures 1-4):

- Measure 1: Repeated instrumental bar, I chord (G) in 12/8 meter.
- Measure 2: Vocal line starts with "Oh in the sky".
- Measure 3: Vocal line continues with "mf Doo doo".
- Measure 4: Vocal line continues with "Etc." and "Chord: G Am Am".

System 2 (Measures 5-8):

- Measure 5: Vocal line continues with "As bar 4".
- Measure 6: Vocal line continues with "Chord: D".
- Measure 7: Vocal line continues with "Bars 3-4 repeat alike".
- Measure 8: Vocal line continues with "Bar 3 repeats alike".

Handwritten musical score for "Oh, in the sky, opening". The score is divided into two systems.

System 1 (Measures 10-12):

- Measure 10:** Treble clef with a key signature of one sharp (F#). Includes a triplet of eighth notes and a sixteenth-note triplet. Bass clef accompaniment with chords.
- Measure 11:** Treble clef with a key signature of one sharp. Includes a triplet of eighth notes and a sixteenth-note triplet. Bass clef accompaniment with chords. Chords: *CAmC*.
- Measure 12:** Treble clef with a key signature of one sharp. Includes a sixteenth-note triplet. Bass clef accompaniment with chords. Chords: *Cm*.

System 2 (Measures 13-15):

- Measure 13:** Treble clef with a key signature of one flat (Bb). Includes a triplet of eighth notes and a sixteenth-note triplet. Bass clef accompaniment with chords. Chords: *G*.
- Measure 14:** Treble clef with a key signature of one flat. Includes a sixteenth-note triplet. Bass clef accompaniment with chords. Chords: *Gb*.
- Measure 15:** Treble clef with a key signature of one flat. Includes a sixteenth-note triplet. Bass clef accompaniment with chords. Chords: *G* and *Bm*.

Vocal lines in the first system include the lyrics "Aa" and "Doo".

Oh, in the sky, opening. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

1

Oh ---

Oh ---

Obab.

4

Obab.

If I only could be your love again, theme. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

As it comes to live concerts from the sixties, Zappa himself released "Ahead of their time" and "YCDTOSA vol. V". The first CD includes a one-time only event with members from the BBC Symphony Orchestra, the second is more a collection of oddities. So with "Road tapes", next to the bootlegs from the "Beat the boots" series, you get an idea of an average Mother of Invention concert, though in mono. It ends with Zappa teasing his audience by playing the opening bars of "Octandre" by Edgar Varèse in a brutal, dissonant manner. It's an atonal melody and Zappa warned the audience that they might never want to hear them again after hearing this tune as an encore. But the audience could see the humor of it. Varèse was a French-born composer who lived in the U.S. for the larger part of his life. He titled his composition in French, so Zappa correctly pronounces "Déserts" in the French manner. In English it's deserts, the wasteland.

In 1972 a group of musicians contacted Zappa if it was okay if they called themselves "Ruben and the Jets" after Zappa's album. Zappa more than agreed: he produced their first album and contributed one song, "If only I could be your love again". The corresponding Ruben and the Jets album is called "For real!" (album cover to the right). The melody of this song could very well have been used for another doo-wop song, but here it gets played as mainstream pop music. It shows that Zappa could write such mainstream songs if he wanted to, also as it comes to the lyrics. The lyrics are of the standard love song type. A section with the main theme is presented above. Like "Oh, in the sky", it's in G and the meter is 12/8. Though Zappa also gets credited for also arranging this song, it sounds more as standard pop from this perspective as well, more than on Zappa's own albums. The reason for this is the high degree of rhythmic synchronism between the parts, that's normal in pop music but unusual in Zappa's arrangements. In about all Zappa songs you can find more rhythmic diversity. By just looking at the image of the transcription at a glance, you can already notice this isn't a regular Zappa arrangement.

Uncle Meat - Weasels ripped my flesh (1968-1969)

Uncle Meat was the title of both an album and a movie. This movie only got completed as a video in 1986, with the music appearing on Ahead of their time. The modern harmonies of the Uncle Meat title track sound refreshing till today. Next Zappa recorded a fusion album under his own name. Hot rats features complex interwoven harmonies, obtained through overdubbing. In 1969 he was looking for new directions and disbanded the original Mothers Of Invention overnight. The band members were taken by surprise. The unreleased material Zappa had in stock appeared on Burnt weeny sandwich and Weasels ripped my flesh.

UNCLE MEAT - AHEAD OF THEIR TIME: INTEGRATION

After "Lumpy Gravy", Zappa further consolidated his intentions to combine pop music with modern music and jazz on "Uncle Meat". This double album is imbued with an abundance of ideas, to which Zappa could keep returning. "Pound for a brown" (see the Zappa's teens sections) and "King Kong" became concert favorites. "Uncle Meat" and "Dog breath" returned in a version for small orchestra that can be found on the 1993 CD "The Yellow shark". There are a some live-recorded sections on the album and a few comic pieces of conversation.

"Uncle Meat" was recorded between October 1967 and February 1968, but released a year later in April 1969. The delay was due to Zappa's intent to have it accompanied by a movie of the same name. Several scenes were filmed, but there weren't enough funds to finish it and eventually some band members wouldn't take part in it no more if they didn't get paid for it. Ultimately Zappa gave it up, only to return to the footage in the eighties. To the right part of the album's cover art with "Uncle Meat" in German letters. It doesn't carry the name of The Mothers or Zappa, but it does list the members of The Mothers at that time in the CD booklet.

UNCLE MEAT

1.1 Uncle Meat (main title theme)

The "Uncle Meat main title theme" can be divided in three sections.

1) The first section is a melody that uses the notes of D with C sharp as the melodic centre.

The melody derives its modern music character from the fact that it follows no traditional chords and its structure is determined by intervals and repeating figures, like fourths in the first bar, seconds in the second bar and a repeated figure with a fifth in the third and fourth bar. We'll see some more of interval determined structures in the next section at "Piano introduction to Little House I used to live in". The melody moves several times towards the centre note C sharp.

The opening of "Uncle Meat" is one of a series of examples in this study where Zappa creates harmonic fields by freely mixing as good as all notes of a scale. There's a D pedal note, determining the scale to be D, with the Dsus4 chord played over it in staff 2. The melody in staff 1 follows the VI 11th chord in a broken form. Staff 3 plays through the scale in sort of a counterpoint way. You can hear all notes of D except for C#: that one turns up as the central note of bar 2.

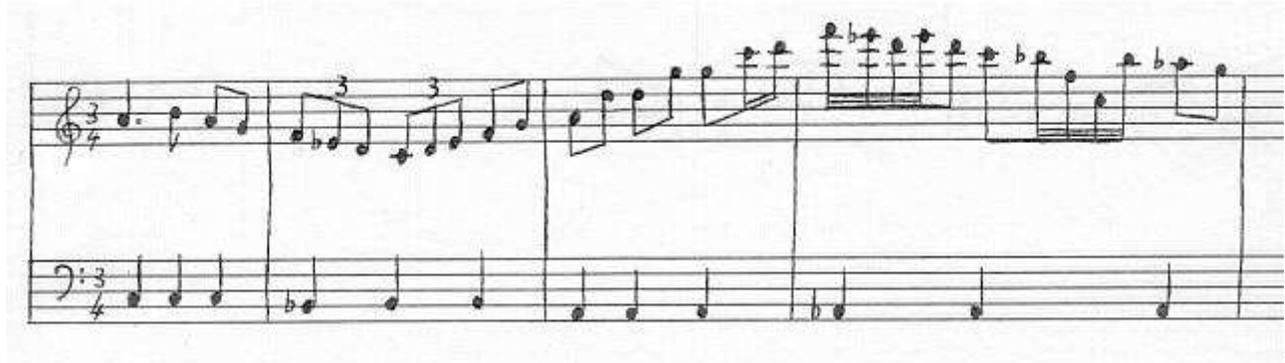
The image shows two systems of handwritten musical notation. The first system is labeled 'Ovabassa' and the second 'Ovbassa'. Each system consists of a treble clef staff with a melody in 3/4 time, and three bass clef staves. The bass staves are annotated with 'Keeps repeating' and various chord symbols like '#F', 'b', and 'b.e.'. The notation includes notes, rests, and dynamic markings.

Uncle Meat, opening (1968 album version). Source: Songbook/Album liner notes with some additions by KS to go from the piano extract in the Songbook to the album ensemble version (update 2011). Note: on the album and in the on-line midi file the song is played a minor third higher; in order to avoid differences with earlier editions of this study all of the above and the text are following the Songbook pitches.

2) The second section follows the E flat scale, filling in the notes that were left out by the D scale of the first part (bars 7-10 of the above note example). Contrary to the first section, in this part normal 5th and 7th chords can be recognized as it comes to the lead melody. It's following a 5th chord on C and a 5th chord on B flat (only the third). Staff two contains a steady Ebsus2 chord.

3) The third section of the main title theme is multi-scale oriented. During seventeen bars several scales alternate each other after each bar with a descending and later on ascending line in the bass as

counterpoint. No note has any key function, but when the bass notes in the next example are taken as keynotes, the keys could be called C, B flat, A Minor (Aeolian) and A flat Lydian. We can also here see examples of that the fourths movement, with which the piece has begun, returns in different appearances. When you look at the complete score in the Songbook, you'll notice several other instances of such fourths movements. You'll also see sequence building in this third section.



Uncle Meat theme, section from the third block. Source: songbook/album liner notes.

Though the "Uncle Meat main title theme" is a short piece, it contains a lot of different technical means, using opposition as well as variation as structure building methods. The return of the theme during the "Uncle Meat variations" is welcome. Here it has a specific intro and outro added to the main theme. The variations are formed by playing the theme a couple of times in different settings. The instrumentation varies, the pitches lie at different positions and the melody is played in several parallels.

Continued below at track 11.

1.2 The voice of cheese

On "Uncle Meat" Zappa included three smaller tracks with monologues. Two feature Pamela Zarubica once more as the Suzie Creamcheese character. I'm following the track lists, but since this study is about Zappa's music, I'll mostly skip commenting upon a track when there's no music in it. The same goes for covers. For the conceptual idea of an album, however, these tracks are of importance.

1.3 Nine types of industrial pollution

"Nine types of industrial pollution" is the first time when Zappa took a solo by himself as a separate composition. It's a sped up track, as the ZFT release "Uncle light" shows. "Uncle light" belongs to the project/object series by the ZFT with additional recordings surrounding an album. This time it's the original vinyl mix, the tracks in an earlier following order and a couple of different edits. "Nine types of industrial pollution" lasts 9:53 minutes on this release, thus much longer than the 5:56 minutes on "Uncle Meat". It's something Zappa frequently did. This solo is in Bb Dorian, with Bb as bass pedal note.

1.4 Zolar Czakl

On the album liner notes Zappa is talking about recording layer over layer and electronically mutating the sound of acoustic instruments.

Handwritten musical score for the opening of "Zolar Czaki". The score is written on two systems of four staves each. The first system includes dynamics like *mp* and *mf*, and performance instructions such as "plus diva bassa parallel, non legato" and "diva". The second system includes *mf* and *mp* dynamics. The music features complex rhythmic patterns with changing time signatures (3/4, 2/4, 3/4) and various note values and rests.

Zolar Czaki, opening. Transcription: KS (update 2007, deposited at the I-depot, The Hague).

This is what's done quite extensively in "Zolar Czaki". It's an even shorter piece than "Uncle Meat", but thus dense that it could take you hours to know what exactly is going on in it. It's atonal music with varying meters, counterpoint and harmonies.

1.5 Dog breath

Zappa has often addressed to his work as one big project, where the individual albums are related to each other by a conceptual continuity. There is a basic truth in this for three main reasons. First his attitude

towards his music never changed. He could integrate all style elements in his output, whatever sounded nice to him for whatever reason. He did this like this on "Absolutely free" in 1967 and still did this on "Civilization phaze III" in 1993. Secondly he never took a distance from earlier work later on in his career. There's a high degree of consistency in his musical output and the repertoire he played live. Thirdly he frequently returned to themes he had used before, mostly in the form of live variants. This he referred to with his expression "the crux of the biscuit is the apostrophe" on "Apostrophe (')". In this third sense "Uncle Meat" can be considered a central album, possibly the album with most crumbs landing on other albums. The next section is about the five appearances of "Dog breath/The dog breath variations", that give a good idea of how he could vary a theme at different points in his career. The capitals refer to the various themes that show up in the different pieces. The presence of B ("Dog breath") or D ("Dog breath variations") is the common element.

Handwritten musical score for a piece in 4/4 time, featuring guitar, bass, and drums. The score is divided into four measures. The first measure is labeled "Pick up---". The second measure is labeled "Etc...". The third and fourth measures are labeled "As bar 1" and "As bar 2" respectively. The bass line features a steady eighth-note pattern in the first two measures, followed by a variation in the last two measures. The drum part is indicated by "Bvab.---" in the second and fourth measures.

Handwritten musical score for a piece in 4/4 time, featuring guitar, bass, and drums. The score is divided into four measures. The first measure is labeled "Fuz-zy---". The second and third measures are labeled "As bar 5". The fourth measure is labeled "As bar 6". The guitar part features a melodic line with a triplet in the second and third measures. The bass line features a steady eighth-note pattern. The drum part is indicated by "3-" in the second and third measures.

A Little faster
8va-->

The image shows a handwritten musical score for a piece titled "Dog breath" (1969). The score is in 4/4 time and consists of two systems. The first system shows a treble clef staff with a melody of eighth notes, a piano (p) dynamic, and a bass clef staff with a simple accompaniment. The second system is more complex, featuring a treble clef staff with a melody, a piano (p) dynamic, a bass clef staff with a simple accompaniment, and a lower staff with a more active bass line. The score includes various musical notations such as accidentals, dynamics (mf, mp), and "Etc." markings.

Dog breath (1969), section. Transcription: KS (update 2008, deposited at the I-depot, The Hague), lead melody in bars 1-8 by W. Ludwig.

1) Dog breath, 1969

In its first appearance on album as track 5 on the "Uncle Meat" CD, the main "Dog breath" theme gets incorporated in a song with three sections. The introduction, some pop music in 4/4, is followed by the main theme, also in regular 4/4. The pitches of the voices are in strange high registers, probably achieved by speeding a track up to double frequency. The theme is segued by a peculiar part with modern music. It starts with fast high clavichord notes and a piano chord, played at a low volume over a steady drum beat. Over these figures various wind instruments play short phrases, responding to each with pauses between them. The transcription below presents the last bars of the main theme and the opening of the modern section. Bars 1-4 have something of both G Lydian and A Mixolydian. As in the opening of "Dog breath" the bass makes a G-A alternation, so that's G Lydian. But with the A in a lower register and longer sustained, the A gets to sound more as the key note. The modern music section is atonal.

- A: Pop introduction.
- B: Dog breath main theme.
- C: Modern atonal section.

Continued below at track 8 with appearances 2)-5).

1.6 The legend of the golden arches

"Pound for a brown/Legend of the golden arches" goes back to Zappa's youth. Originally he wrote this piece as a movement of a string quartet. There are many versions of this title. The specific "Uncle Meat" version exists as an orchestra arrangement by Robert Peate, authorized by Munchkin Music (Michael Peyton sent me a copy). The general set-up of this piece is:

0:00 Intro, going similar to the "Foamy soaky" example from my Lumpy gravy section, bars 4-7.

0:08 Main theme (see the Lost episodes section of this study).

0:58 Second block. At this point the key becomes G# Dorian. While Robert maintains the presets of the B Mixolydian key from the beginning, during this section the score involves an A# and an E#. Characteristic is the irregular G#-D# alternation for the accompaniment, over which a number of melodies are played.

The harp/piano/celeste part can get pretty dissonant with the other parts, to be played lightly in the background.

The image shows a page of a musical score for the piece "Legend of the Golden Arches". The score is for a full orchestra and includes parts for Oboe I, Clarinet I, Bass Clarinet, Trombone I, Percussion 1, 2, and 3, Harp, Piano, and Celeste. The score is in G# Dorian (two sharps) and 2/4 time. It features complex rhythmic patterns, including triplets and sixteenth-note runs. Dynamics range from fortissimo (ff) to pianissimo (pp). The score is marked "Full Score" and "D".

The image shows a page of a musical score for a symphony orchestra, starting at measure 39. The score includes parts for Flutes I and II, Oboe I, Clarinet I, Bass Clarinet, Bassoon, Trumpet I (muted), Trombone I, Trombone, Percussion 1, 2, and 3, Harp, Piano, Cello, and Double Bass. The music is in 4/4 time and features various dynamics such as *ff*, *f*, *mf*, *p*, and *pizz.* Percussion parts include snare cymbal, tambourine, and bass drum.

The legend of the golden arches, 1:13-1:29 (the meter is 4/4). Transcription/arrangement by Robert Peate.

1:33 Part of the main theme returns, being varied upon.

1:54 Third block, that you might call another form of "Uncle Meat" variations. The first motif from the main title theme re-appears frequently, being led through varying keys. The example below contains three instances:

- Bar 1: the motif in a 7/4 meter.
- Bar 2: repeats, but now other melodic lines enter the picture.
- Bar 3: while these lines continue, the motif returns once more in the shape of a variation.

These melodic lines continue without following a specific meter or scale (some notes keep being altered). It's a rather free through-composed section. The meters in the example below are my notational choice, other notations are very well possible.

The image shows a musical score for 'The legend of the golden arches'. It consists of three systems of staves. The first system (measures 8-11) includes parts for Celeste, Harps, Keyb., and Bells. The second system (measures 12-15) includes parts for Harps and Keyb., with tempo markings 'A bit slower' and 'First tempo'. The third system (measures 16-19) includes parts for Harps and Keyb. The score is in G major and 7/8 time.

The legend of the golden arches, 1:54-2:22. Transcription: KS (update Summer 2019, deposited at the I-depot, The Hague).

Note: at this point the score by Robert is a re-arrangement done with an amount of liberty. The above attempts to follow the album literally.

The example above avoids the minor second in the harmonies till the end: on top of an E (major triad) chord the combination Ab(G#)-Eb-G is getting played, though with a large interval distance between these two chords.

3:15 Suzie Creamcheese: "The first thing that attracted me to the Mothers ..."

3:27 End.

1.7 Loui Loui

"Loui Loui" is a live recording from the Royal Albert hall, featuring sax improvisations and Don Preston briefly playing the pipe organ in the hall with the progression from "Loui Loui". It's a reference to Richard Berry's hitsingle, something Zappa used as a gimmick throughout his career. See also "Plastic people" from the Absolutely free section.

1.8 The dog breath variations

Continuation of above, track 5. Track 8 is the "The dog breath variations", with its theme being presented above at track 5, appearance 1). Here I'm continuing with appearances 2)-5).

2) The dog breath variations, 1969

"Dog breath" returns on "Uncle Meat" in track 9 with variations. The opening starts with the theme as presented below in a rhythmical variation. Instead of a continuing a 4/4 set up, the meters are here changing frequently. During the first half the accompaniment is predominantly dealing with harmonies, whereas in the second half a counterpoint movement is taking over the upper hand. The melody is made up of a series of phrases, with each phrase reacting to the previous one by taking over some of its characteristics. In classical music they call this type of variations character variations as opposed to variations that keep varying a whole theme. The example below just shows the two opening variations upon the whole theme and the beginning of a new phrase. This version starts with the Em7 chord and with the E as root note for the opening bars, its basis has become E Dorian.

D: Dog breath variations #1.

3) Dog breath, 1971

The 1971 version on "Just another band from L.A." begins with a repeated rock riff, before the original theme returns. This riff can already be recognized as one of the motifs in the accompaniment in both "Uncle Meat" versions (the bass line at the beginning of the above "Dog breath" version; on "Dog breath variations" it's played halfway by the acoustic guitar). Here Zappa is using the individual voices of Flo and Eddie to make some divergence between them for the "fuzzy dice ..." line, as shown in the transcription Wolfgang Ludwig made of this particular execution (see "Dog breath (1971)" from the Just another band from L.A. section). The closing with the "hear my plea" section is here far more extended, including a guitar solo as part of the outro.

E: Rock introduction.

B: Dog breath main theme.

F: Outro with guitar solo.

The dog breath variations (1969), opening. Transcription: KS (update 2008, deposited at the I-depot, The Hague). The lead melody could be taken over from the Dog/Meat example, though the meters have been adapted here to be more in line with the specific Uncle Meat album version.

4) The dog breath variations, 1974

The two 1974 versions, available on "YCDTOSA II" and "The dub room special", were recorded shortly after each other and only differ in instrumentation. For transcribing I used the "Dub room special" track. The 1971 opening riff is used again, but now followed by the "Dog breath variations". This version distinguishes itself from the one on "Uncle Meat" by that the accompaniment isn't adding harmonies, but immediately starts off with a counterpoint line. It remains two part counterpoint all through. Regarding style the bass has something of an improvised "walking" bass in jazz compositions. It's prescribed here because it goes exactly the same on both 1974 executions, and also because it partly overlaps with the 1969 "Dog breath variations" bass line.

E: Rock introduction.

D: Dog breath variations #2.

Dog breath variations (1974), opening. Lead melody taken over from W. Ludwig and the Dog/Meat example; specific 1974 elements transcribed by KS (update 2008, deposited at the I-depot, The Hague).



An unreleased version of the "Dog breath variations" is part of the "Dog/Meat" combination Zappa orchestrated in the seventies for the Wazoo and Orchestral favorites ensembles. Presented above is the opening of the oboe part, auctioned on internet, spring 2010. By the meter division you can see that this arrangement suggests to some extent that it's different from the other examples shown here. At some points you can say it's a notational choice. At bars 3-4 however you get 4/4 followed by 9/8 with a bow for the lead melody. This implies that some of the other parts must be doing something in 9/8 here, which is not the case on "Uncle Meat". Otherwise this division would have no purpose. The oboe part is the only element of the score I've encountered, so I can't say how this version would sound.

5) Dog breath variations, 1993

For the Ensemble Modern Zappa wrote a score that begins quite mysteriously with two odd numbered meters alternating each other (9/8 plus 11/8). These two bars are next used as a vamp for the slow introduction of the main theme. The hereupon following variation returns to the normal tempo of the original versions. The opening gets commented upon in an article by Barend Tromp in the Dutch magazine "Mens en melodie" (People and melodies), June 2000, where it is presented as an example of mixing elements from (modern) classical music (the odd rhythm), pop and jazz (the pulse of 8th notes).

G: Modern intro.

D: Dog breath variations #3.

This 1993 version begins with a vamp like figure of two bars in 9/8 plus 11/8. Its meters division is thus completely new compared to the previous versions. The basic time unit of a quarter note becomes a dotted quarter note. Apart from that the tempo is also slower, thus the whole becomes extra slow compared to previous versions. But when the melody has arrived at the 3/4 bar, 16th notes are used, causing an acceleration to the tempo of the earlier version. The notes of the vamp mainly form the chord E-B-F#-G, with occasionally an A or C# added to it. During the bars in which the vamp is used, Zappa has harmonized the lead melody as a series 5th chords. The combinations with the notes of the vamp make the harmony of the whole very free, mixing all notes of the E Dorian scale at will. To the right the Ensemble Insomnio performing the Yellow shark (Vredenburg, Utrecht, 2-9-2019). "The dog breath variations" was the concert opener as well as used for an encore.

Handwritten musical score for "Dog breath variations" (1993), opening. The score consists of ten staves. The top two staves are for a vocal line and a guitar line. The next two staves are for a bass line and a double bass line. The bottom four staves are for a piano accompaniment. The score is in G major and 9/8 time. It features various rhythmic patterns, including eighth and sixteenth notes, and rests. There are handwritten annotations: "Others continue in this manner" in the second system, and "(Acc continues)" in the fifth system. The word "bass" is written at the beginning of the third and tenth staves.

Dog breath variations (1993), opening. Source: bars 3-6 correspond with bars 5-8 of the original score (as published in the mentioned "Mens en melodie" article, here in reduced form), other bars added by KS.

1.9-10 Sleeping in a jar - Our bizarre relationship

"Sleeping in a jar" is the second movement of the above mentioned quartet. Both movements are included in the Zappa's teens section of this study. With "Sleeping in a jar" the album first moves over from modern music to more pop-like music. "Our bizarre relationship" is Suzie Creamcheese once more.

1.11 The Uncle Meat variations - Exercise #4 (1973)

Continuation of above, track 1.

Track 11 features the "Uncle Meat variations", being variations upon the material from track 1. The later "Exercise #4 (1992)" from the Yellow shark section of this study appears as an intro for these variations on "Uncle Meat". The section below starts with seven bars from the third section where the bass and descant are mirrored compared to the "Uncle Meat main title theme". The theme is now played in a lower register and the chords are played via the descant part. After these bars part one of the theme returns, now sung by high vocals. Especially the soprano voice by Nelcy Walker is touching. Notable is the percussion part here. After ticking the beat in straightforward 3/4, the percussion starts playing in 2/4 when the main theme enters again, causing a mild form of polyrhythms. All beats are executed on a tom with C as pitch (the key here then being C Mixolydian for part one of the theme, with the theme being transposed a minor third up). The accentuated notes from bar 8 onwards indicate the downbeat by the percussion, played by the cymbal as well, while I've notated the melody in 3/4 as above during the main title theme.

When one would like to study the variations upon "Uncle Meat" Zappa wrote, one should not only consider the "Uncle Meat variations" itself, but also other and later appearances of this title:

- Its return during the second half of "The legend of the golden arches", track 6 above.
 - The experiment with playing it against "King Kong" during "Uncle rhebus". See below at the bottom of this section.
 - "Exercise #4" as played on "Road tapes, venue #2". The first minute of this specific version contains melodic variations upon material from "Uncle Meat", before "Exercise #4" starts as we know it from "The yellow shark". See below.
 - "Uncle Meat" would next re-appear being played live during the 1973-4 tours, present on "YCTDOSA Vol. II" and the ZFT releases "The dub room special", "Road tapes, venue #2" and the "Roxy performances".
 - "Uncle Meat (1992)" would re-appear again in 1992, being played by the Ensemble Modern. Like in 1973-4 it has its tonic for theme one repositioned from D to G, becoming G Lydian. So you can hear this theme in all three major-type of scales on Zappa's albums. See the Yellow shark section from this study for further comments upon this title.
- The ZFT further released the following two titles from their archive on "Uncle light":
- "Exercise 4 variant" with at some points some more variations.
 - "Uncle Meat (Live at Columbia University 1969)", played live as on "Uncle Meat" before the album was out on the market. It has a 15 seconds coda of its own.

1

mf

mf

mf

mp 4 5

Keeps repeating

Etc. (parallel)

5

Yah yah ---

Figure keeps repeating

Figure keeps repeating

mf

9

Ah ---

3

3

The Uncle Meat variations, section. Source: songbook/album liner notes, adapted by KS to the Uncle Meat variations as played on the album (update 2011).

Exercise #4 (1973), opening. Transcription: KS (update fall 2019, deposited at the I-depot, The Hague).

When studying Zappa's music for variations one has to bear in mind that variations are not only happening during an individual performance of a piece. Maybe more importantly, they are happening by comparing different versions over time. In the YCDTOSA II section of this study I've included a list of examples of version differences, coming by in this study. "Strictly genteel" can be seen as the most classical form of

variations within one piece (see the L.S.O. section for the details). In case of the above listed "Uncle Meat" appearances, the ones carrying "Uncle Meat" in their title always leave the main title theme intact. It can get transposed and instrumentated anew, different accompanying figures can get introduced, but the theme, as represented in the "Uncle Meat" CD booklet remains the same. The more drastic differences are new intros and outros, only indirectly or not at all being related to the main theme. Zappa did vary the main theme itself in versions carrying different titles. Its re-appearance during "The legend of the golden arches" can be seen as character variations: some elements from theme one return repeatedly, but not the complete theme. "Exercise #4" (1973) does know two variations upon theme one in its entirety. The correspondence of the bars from "Uncle Meat" and the example from above are shown in the table below. The first thing to notice is that "Exercise #4" knows varying meters, while "Uncle Meat" is in 3/4 all through.

Phrase	Uncle Meat	Exercise #4 (1973)
A	Bar 1	Bars 1-2 in 4/4 and 2/4
B	Bar 2	Bar 3 in 7/8
C	Bars 3-4	Bars 4-5 in 11/8 and 7/8
D	Bars 5-6	Bars 6-7 in 11/8 and 7/8
E	Bar 1, repeating	Bars 8-9 in 4/4 and 2/4
F	Bar 2, repeating	Bar 10 in 7/8

More details regarding the phrases:

- A. The bass pedal note has changed from D to A, causing a switch from D to A Mixolydian. The steady accompanying figures from "Uncle Meat" don't return. The harmonies from "Exercise #4" are much more free, beginning with A7 in bar 1. Bar 2 is inserted, compared to "Uncle Meat".
- B. This bar got extended from 3/4 to 7/8. The bass makes a melodic counter movement instead of remaining a pedal note.
- C. The meter division got changed. It has extra melodic notes, but the melody from "Uncle Meat" can still be recognized, sometimes repositioned. While the descant keeps following notes from A Mixolydian, the bass and other parts are playing with or against it, using many chromatic notes. The whole starts to sound atonal, rather than diatonic.
- D. The same idea gets applied once more. Bar 7 is evasive, not belonging to A Mixolydian anymore. It's used for modulating to C Mixolydian, not in a standard manner.
- E. While "Uncle Meat" literally repeats theme one, "Exercise #4" begins with a transposition of bars 1-2. Bars 8-9 are now in C Mixolydian.
- F. Similar to phrase B.

The second variation of theme one lasts until 0:42. Next a large sequence of variations upon phrase A only begins, lasting till 0:58. Only at that point "Exercise #4" begins, as we know it from the "Uncle Meat variations".

1.12 Electric Aunt Jemima

There's a pause between tracks 11 and 12, while all other tracks segue. To some degree the original "Uncle Meat" album could be divided into two blocks:

- Tracks 1-11, "Uncle Meat" through the "Uncle Meat variations", with an accent upon modern compositions.
- Tracks 12-22 and disc II, with an accent upon jazz, improvisations and some pop songs.

The "Uncle Meat movie excerpts" got inserted with the re-release on CD. The ZFT release "Uncle light" from 2016, largely a re-issue of "Uncle Meat", shows that Zappa once had a completely different sequence

in mind regarding the tracks. At that point the songs got hustled without any attempt to group them for their style. Perhaps the album as a whole comes out better balanced that way.

"Electric aunt Jemima" is a second more pop-like track. The lyrics however are modern poetry, reproduced in the booklet. The same goes for all the songs from "Uncle Meat", that have lyrics (most tracks are instrumentals). They refer to actual events, but the emotions they provoke are personal and their meaning is deliberately kept in the dark. Here it has Aunt Jemima, the cereal products brand, as a starting point.

1.13-14 Prelude to King Kong - God bless America

Improvising in odd meters belonged to the standard repertoire the Mothers had in the sixties. See the "America drinks", "Didja get any onya?" and "Toads of the short forest" examples/comments from this study for more upon this topic. Here the band is playing over 5/16 in the studio. The opening is composed. Two saxes are playing synchronously in staves one and two. Staff three represents the steady bass figure from this piece, played with only some minor variations upon it. This bass figure sets the key to F# Dorian.

Prelude to King Kong, opening. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

This composed opening is made up of three phrases:

- Bars 1-9. After picking upon the E-C# combination a little melody follows, first chromatically in bars 5-6, next diatonically during bars 7-9. At some points the brass section is playing equal with the rhythm section (like in bars 5-6), at other points they are playing between beats (as in bars 3-4).
- Bars 10-16. Variation upon the first phrase of the King Kong theme. See below for the notes or the "Uncle Meat" CD booklet for the lead melody of the entire theme. Harmonically it's made up of the same figures, but transposed. The bass from Eb to F# pedal and the lead melody begins on E and C# (parallel playing) instead of Bb. Rhythmically it goes pretty differently, with the figures being played in a 5/16 environment. The four motifs from this figure last 3/8 in the original score (forming a little sequence). Here they've become 9/16, where I've indicated their starting points with letters. In the original score the four notes of the motif had 2-1-1-2 as their duration relationship (as 16th notes). Here this relationship has become 3-2-1-3. It's not played nor transcribed with a high degree of precision, the motifs sort of float over the bass figure. The tempo is high and when you're allowing a bit of rubato, the pattern becomes clear. The Roxy section gives an overview of examples in this study, where Zappa is using two meters simultaneously.
- In bar 17 the transition from phrase two to three is taking place (not included in the transcription anymore). This third phrase is being played between 0:11 and 0:19. From 0:19 onwards the band starts to improvise, repeatedly referring to the material from the composed section. "God bless America" features the Mothers singing this patriotic song live at the Whiskey a go-go. It was written by Irving Berlin at the start of the 20th century.

1.15 Pound for a brown

"Pound for a brown" is a second alternative recording of "Legend of the golden arches", with the tracks being sped up to high registers. As also mentioned above, its main theme is included in the Lost episodes section of this study. Zappa would keep playing "Pound for a brown" live all through his career. Though these live versions are closer to the way the themes are played during "The legend of the golden arches", all other versions carry the title "Pound for a brown" only.

1.16 Ian Underwood whips it out

"Ian Underwood whips it out" begins with Ian Underwood introducing himself, re-telling how he became a member of the band. To the right a small photo of him from the CD booklet, next to Zappa, Don Preston and Euclid James ("Motorhead") Sherwood. Zappa asked him to "whip out" his saxophone playing and a live example from Denmark is included here:

- 0:00 Introduction with Ian talking.
- 0:36 Sax solo begins with only the drums.
- 1:50 Other instruments are slowly coming up.
- 2:05 The bass part turns into a vamping figure and sets the key to Eb Dorian. The main accompanying harmonies are formed by the Ab and Ebm chords, superimposed above it in an irregular manner.

It's another example of the drummer beating the 5/16 figure as he also did during "Prelude to King Kong". When the vamp turns up, the dotted eighth note is taken as the downbeat note by the bass and two 5/16 figures are combined into one measure of 10/16. The total vamp takes up two bars, alternating Eb and Ab and playing some notes in between with varying rhythms. Melodically the bass of this vamping figure mostly follows the line Eb-Bb-Eb-Ab-Bb.

Zappa can be held responsible for creating this ambience. In the example above this element is the accompaniment, corresponding with staves two through four. Since this track knows no composed lead melody, one might ask if Ian Underwood shouldn't have been co-credited for his solo part in staff one.

- 3:05 The bass turns into a free jazz type of playing. The harmonies can be dissonant and the atmosphere is moving towards atonal.
- 3:51 Second vamping figure by the bass, re-installing the Eb Dorian tonality.
- 4:10 Atonal coda. The drums have stopped.
- 5:05 End.

The first system of the handwritten musical score consists of four staves. The top staff contains a melodic line with various rhythmic values, including eighth and sixteenth notes, and some triplet markings. The second and third staves show complex harmonic structures with multiple notes beamed together, suggesting dissonant or atonal textures. The bottom staff features a bass line with a mix of eighth and quarter notes, some of which are beamed together. The key signature is indicated as three flats (Bb, Eb, Ab) and the time signature is 10/16.

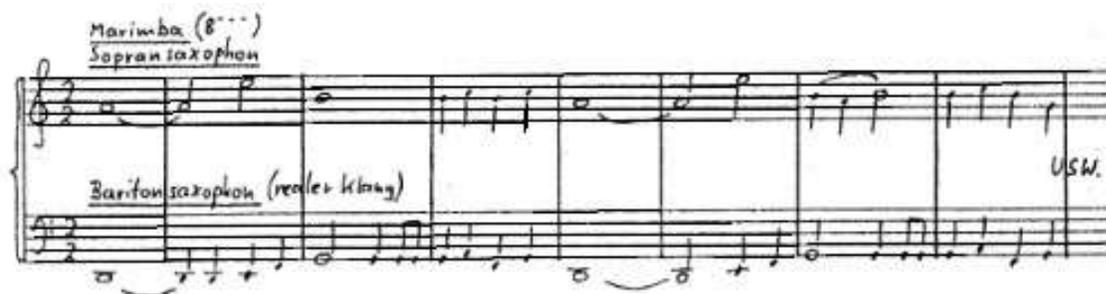
The second system of the handwritten musical score continues the composition with four staves. The top staff shows a melodic line with a 'trva' (trill) marking above it. The second and third staves continue the complex harmonic textures with beamed notes and rests. The bottom staff shows a bass line with a mix of eighth and quarter notes. The key signature remains three flats (Bb, Eb, Ab) and the time signature is 10/16.



Ian Underwood whips it out, 2:20 till 2:39. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

1.17-18 Mr. Green Genes - We can shoot you

"Mr. Green Genes" is the vocal version of a song that would re-appear in a more elaborate version on the "Hot rats" album from 1970. The song knows three themes, following the pattern as briefly described in the Hot rats section from this study. Here these themes get sung twice with in between an instrumental rendition of these themes. On "Hot rats" this piece gets called "Son of Mr. Green Genes". The harmonic pattern of the themes is also used for accompanying the extensive soloing during this version.



The Ludwig study is dealing with these pieces on pages 74-5 and 166. The above is from page 166, where you can see the first theme with a second bass line beneath it. It's a mild form of counterpoint, with both parts being harmonically complementary. On "Hot rats", with its intensive use of overdubbing, the harmonies are far more complex than on the "Uncle Meat" version. It has been transcribed by Andy Aledort in the Hot rats guitar book, where you can find these harmonies on pages 30-31. The bass line from above is played similarly on "Hot rats", but not transcribed. As a guitar book, the bass part isn't included. During the repetitions of the first theme another figure gets added, that Andy refers to as fill. It makes the total harmony dense, with Zappa mingling all notes from a scale. "We can shoot you" is another example of a modern instrumental piece, atonal and partially improvised.

1.19 If we'd all been living in California

Specifically during the sixties and the onset of the seventies, Zappa might record and film his group on the road or at work, often without informing them. This could sometimes go at their expense and with "If we'd all been living in California" Jimmy Carl Black is the victim. He gets credited for "poverty" as well in the CD booklet. In 1965 Zappa had promised the band members to become rich and famous if they followed him. Throughout his life, Jimmy kept complaining that only the second got fulfilled.

1.20 The air

"The air" is a third relatively normal popsong from the album. "Uncle Meat" and "Cruising with Ruben and the Jets" were recorded simultaneously. "The air" goes stylistically similar to the doo-wop songs from the latter album. Like "Electric Aunt Jemima" it could have been included in that album just the same. It has the repeating triads in staff 3 and the doo-wop harmony singers in staves 2-3. Only the lyrics of both these songs are in line with the "Uncle Meat" concept, being poetic and mysterious. References to existing brands are made, like Aunt Jemima, Chevy '39 and Nash. The drawn purple car from the CD booklet seems to be inspired by these vintage car models.

The image displays a musical score for the song "The air". It consists of two systems of staves. The first system includes a vocal line with lyrics "Yes — they — grabbed me ...", a piano accompaniment with a repeating triad in the right hand, and a bass line. The second system continues the piano accompaniment and bass line. The score is written in 12/8 time with a key signature of three sharps (F#, C#, G#). Dynamics include *mf*, *mp*, and *p*. A first ending bracket is marked above the first system, and a section starting with a fermata is marked with a '3' above the second system.

The image shows a musical score for the ending of "The Air". It consists of five staves. The top staff is a bass line starting at measure 5, marked with a '5' above it. The second staff is a treble line. The third staff is a bass line with dynamic markings 'p' and 'mf'. The fourth staff is a treble line with a dense chordal texture. The fifth staff is a bass line. Annotations on the right side of the score state: "Bars 5-6 keep repeating alike," and "fading out till the end."

The air, end. Transcription: KS (update summer 2018, deposited at the I-depot, The Hague). "The air" is in E with the meter being 12/8. The example above is the end with the IV and V chords alternating, ending with chanting "then I'll crash in my Nash". Without returning to the tonic, one might also interpret this as a modulation to A Lydian. In for instance bar 5 you can see that Zappa is using different subdivisions of the 12/8 meter simultaneously. Below there's more about this topic at track 22.

1.21 Project X

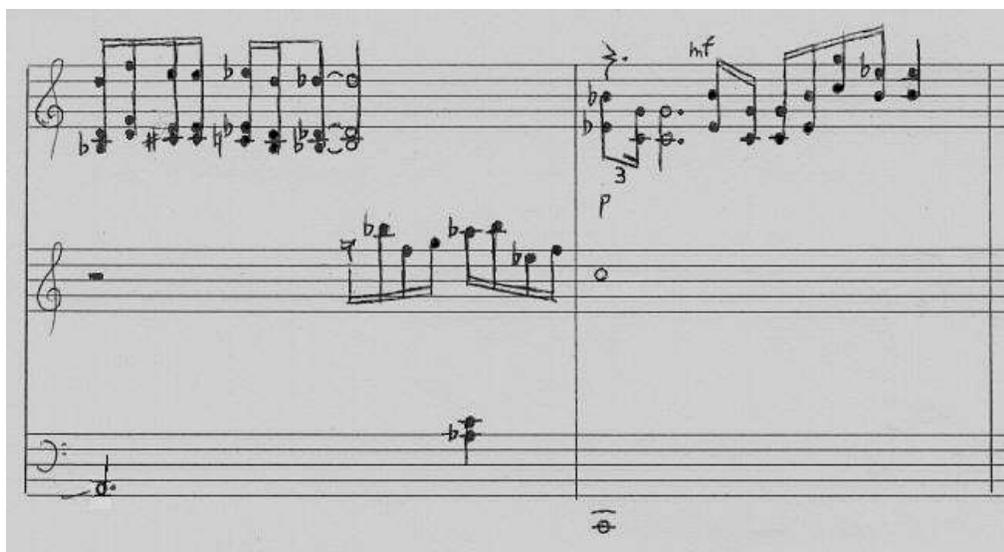
The first half of "Project X" is a refined example of mixing diatonic and atonal material. It begins gently in Bb with an acoustic guitar playing the Bbsus4 and Eb chords, mixed with the Bb chord beneath it in bars 2-3 (I miswrote myself in the 3rd printed version: B minor should be Bb). Bbsus4 resolving to Eb in Eb Lydian would be another interpretation of bar 1. In the Burnt weeny you can read about the difference between the "horizontal" and "vertical" approach, where I'm following the vertical approach (that is I consider the Bb to be the pedal note, rather than the Eb). Over these chords the clarinet begins a sentimental melody using notes of the same scale and applying some larger interval jumps. Bars 13-17 are the vibes and brass instruments, unleashed with rapid partly atonal partly diatonic movements. After they have spewed their energy the guitar chords return just as quietly as they begun.

At 1:47 the second half of this title starts with music not directly related to the first half. It's atonal, a mix of instruments with their regular sound and with mutated sounds, sometimes accompanied by pulsing chords.

Handwritten musical score for the first system. The top staff is a treble clef in 4/4 time, showing a melodic line starting in the fourth measure with a dynamic marking of *mf*. The middle staff is a treble clef in 4/4 time, showing a rhythmic accompaniment of chords with dynamic markings: *mp*, *pp*, *p*, *pp*, *mp*, *pp*, *p*, *pp*, *p*, *mp*, *p*, *mp*. The word "Etc." is written above the middle staff. The bottom staff is a bass clef in 4/4 time, showing a rhythmic accompaniment of chords with a dynamic marking of *p*. A brace on the bass staff indicates a change in accompaniment to a different chord.

Handwritten musical score for the second system. The top staff is a treble clef in 4/4 time, continuing the melodic line with the annotation "Accompanying figure continues". The bottom staff is a bass clef in 4/4 time, showing a simple accompaniment with a dynamic marking of *mf*.

Handwritten musical score for the third system. The top staff is a treble clef in 4/4 time, featuring a complex, multi-measure accompaniment figure with a triplet and various accidentals. The bottom staff is a bass clef in 4/4 time, showing a simple accompaniment with the annotation "Accompanying figure stops".



Project X, opening. Transcription: KS (update 2005, 3rd printed edition 2007; bass line renewed in 2012).

1.22 Cruising for burgers

The outlines of this track go as:

- 0:00 Little intro (pick-up bar).
- 0:01 Theme 1, phrase 1, "I must be free ...".
- 0:15 Theme 1, phrase 2, "Frees me".
- 0:22 Theme 2, "Gotta do a few things ..."
- 0:32 Theme 3, phrase 1, "The difference between us ...".
- 0:46 Theme 3, phrase 2, "My phony freedom cart ...".
- 0:56 This whole sequence gets repeated instrumentally, ending with phrase 2 of theme 3 being varied upon as the coda.
- 2:17 End.

Handwritten musical score for the 'Cruising for Burgers' section, measures 24-32. The score is written on four staves. The top staff is in treble clef with a key signature of one flat. The second and third staves are also in treble clef. The bottom staff is in bass clef. The score includes complex rhythmic notation with subdivisions like 24/32 and 3/4. Handwritten notes include 'Others as bar 2' and 'Others as bar 3'.

Handwritten musical score for the 'Cruising for Burgers' section, measures 33-36. The score is written on five staves. The top staff is in treble clef with a key signature of one flat. The second and third staves are also in treble clef. The fourth staff is in treble clef. The bottom staff is in bass clef. The score includes complex rhythmic notation with subdivisions like 3/4, 6/8, and 24/32. A handwritten note 'A little slower' is present at the beginning.

Cruising for burgers, section. Transcription: KS (update 2017, deposited at the I-depot, The Hague).

"Cruising for burgers" is a good example of how Zappa could vary subdivisions within a meter. The two examples above contain all of theme 1 with a series of rhythmic variations within a bar, which absolutely lasts 3/4 in total. The first is from the opening, the second from the instrumental reprise. The subdivisions being used are:

- Ex. 1, bars 2 and 4: 12/16 as four times three 16th notes.
- Ex. 2, bars 2 and 4: 6/8 as six times two 16th notes.
- Ex. 1, bars 3 and 5 - Ex. 2, bars 3 and 5: 24/32 with eight times a fast uneven grouping as ONE-TWO-three for the snare drum/bass drum. It's interesting to hear that the cymbal/hi-hat is ticking in 6/8, so this is

a form of polyrhythms. It's visualized by an extra line in bar 3 of both examples.

- Ex. 1, bars 6-7 - Ex. 2, bars 6-7: 3/4.

Different notations are possible, but the idea is clear and most directly audible by the drum part, that I've partly included. The melody is largely made up of sustained notes, so it's the changing rhythm, that attracts most attention. The harmonies are formed by semi-improvised lines by a couple of instruments.

Bar 1 in 2/4 serves as a pick-up bar, with one beat split up into two and the next into three as triplets. Bars 1-7 include diatonic material, mixed with chromatic notes. They aren't neatly following keys, but only implying D and F Mixolydian for bars 2-5. Bars 6-7 don't contain sufficient notes to say anything about a scale. Theme 2, on the other hand, is stable in B Dorian, though you have to wait till bar eleven of the second example to hear a G-sharp. During the instrumental version of the second theme, you can again see that Zappa is applying different subdivisions. This time it's in 4/8 (or 4/4 depending on the notation). The bass line is played straightforwardly in 4/8, while the Bm-chord is consistently pulsing off-beat.

In 1976 "Cruising for burgers" would return on the "Zappa in New York" album in an entirely instrumental version. It includes many alternative passages and a solo in D Mixolydian.

2.1-3 Uncle Meat film excerpts - Tengo na minchia tanta

"Uncle Meat", the movie, was completed in a couple of phases. When it got finally completed in 1988 as a video, it included concert recordings from 1968 and material shot on various locations from around 1971 and 1982. For instance Zappa's house or a local grocery store. The CD booklet tells you about a plot, accompanied by cartoon-like drawings of a series of scenes. Because of the absence of a serious budget, eventually nothing got filmed in this manner. "Tengo na minchia tanta" is a rock song from the early eighties takes, featuring Massimo Bassoli. It's a bit of an anomaly, being included on this CD as the only piece from the 1982 takes. For that reason its themes are included in the You are what you is section of this study as an example of rock 'n roll. The music from the 1968 concert would appear on a separate CD, called "Ahead of their time". See below for a description and some examples. For the "Uncle Meat" CD, Zappa included some forty minutes with dialogues. So far the ZFT hasn't come up with a re-issue as a DVD, but copies of the video can be obtained.

2.4-9 King Kong (1969)

The "Uncle Meat" album ends with 16-minute jazz piece called "King Kong". It has a short composed opening theme and next allows the members of the band to improvise (the subdivision of the title into a series of tracks refers to who are playing/soloing in a particular section). Such improvised sections were an important part of Zappa's live performances, which we can hear on the bootlegs from this period and the later official live recordings. "King Kong" was included in most of the tours and we can listen to other improvisations on "Ahead of their time", "What you can't do on stage anymore, vol. 3" and "Make a jazz noise here". The next comment on "King Kong" stems from Wolfgang Ludwig's study, pages 134-5, published in 1992. The "King Kong" theme consists of sets of sequences and variations on motifs in E flat Dorian (the bass is giving a pedal point on E flat). The melody uses this scale either in a pentatonic order or in the normal following order. The following example is the opening sequence of the melody.

Fast 2

Chord: Absus4
Bass: Eb pedal

King Kong, opening bars. Source: album liner notes.

Bars 1-2:
Pentatonic

Bars 3-5:
Eb Dorian

Bars 6-12:
Pentatonic

King Kong, opening bars, with the Pentatonic-Dorian alternation as explained by Wolfgang Ludwig (1992).

The literal quote goes as: "The melodic sequence [in bars 1-4] is based upon a repetition of motifs, that shows itself first as a section from a downwardly played pentatonic scale (bars 1-2 without an F), next as a part of the Eb Dorian scale (see the C in bars 3-4). The Eb tonality manifests itself by an ongoing bass riff of two bars [Ponty plays the music of Zappa version; on Uncle Meat it's a plain Eb pedal]. Also in bars 6-12 the pentatonic colouring of the melody becomes clear; because only in the first and second grade fifth-related notes are used, Ab, Db, Eb (1st grade) and Gb, Bb (2nd grade). The F and C notes first return again in the next bars. Also the members of the sequence (bars 1-4) are following the ladder of a downward pentatonic scale (first notes: Bb, Ab, Gb, Eb)."

The example above has the King Kong opening as it is indicated in the "Uncle Meat" CD booklet, namely with an Eb pedal and the Absus4 chord. Something that can be confusing, is that the album version goes different. When you're raised with classical music, you're taught that the score is sacred. What the score says is what the composer wants, not to be deviated from. In the case of Zappa this is different. Because of the list below, I've become convinced that his scores are neither blueprints nor ideal versions of how he wanted many of his compositions to sound. They form a set of versions by themselves, equal in value to the different versions on albums. Zappa could write out sheet music as he does in the "Uncle Meat" booklet, namely the lead melody with pedal notes and the chords indicated by their symbols. But he could also write out every detail, not only in the case of orchestra- and chamber music, but also for his rock band. So it can be estranging to see such detailed sheet music to notice that the first recording of it goes different. Or even that parts aren't included.

In the case of "King Kong", the "Uncle Meat" booklet score can be seen as a blueprint. But even so, the indicated Absus4 chord is not actually used on the "Uncle Meat" album sections that follow below. The

first example contains the opening bars, that basically use Absus2, or a plain fifth, instead of Absus4 (in bar 2 the total sounding chord gets extended to an Ab 13th chord). The melody is played over this Absus2 chord in the bass, with the pulsing Eb note in it standing central. So the opening has something of both Ab Mixolydian and Eb Dorian. The theme itself is notated in a fast 3/8 meter by Zappa. For the accompaniment you can see that these 3/8 motifs are grouped into larger meters. During the opening 4 times 3/8 becomes 12/8. Most instruments play it as if it was similar to 4/4, thus to be subdivided into 8 instead of 12, but the drummer is ticking 12/8. In the case of Zappa what the drummer does is decisive for the meter (something you can note by comparing album versions with the score). When the theme gets repeated it has become 6/8, followed by 12/16. The pedal note is here plain Eb, where it stays during all of the soloing. Zappa notated the final C of the melody as to be sustained over a number of bars, so obviously he wanted the accompaniment to fill this in. In the second example below you have a sustained Absus4 chord and a progression in staff 3: IV-III-IV-III-IV-III. The bass line descends from Eb to Bb. Some players repeat the C note, while staff 1 represents an improvised closing melody. The third example is a little outtake from the solo sections. It has Bunk Gardner playing sax, electronically transformed, while Zappa plays a chord progression. The transformation makes the sound of the sax unrecognizable, and it gets recorded in the form of parallel octaves. The chord progression by the guitar is, if I'm not missing some notes, I 7th - II 7th - I 11th - II 7th - I 11th in Eb Dorian. Above to the right Bunk with Frank in the studio, looking at scores (section of a photo from the Michael Ochs archive as reproduced in the Meat Light booklet). The theme returns once more in a twisted form during the outro. The pedal note has shifted from Eb to Db, played by two gongs. It gets played as if half of it is in Db major, the other half being atonal. It's deliberately done in this manner. The notes can still be recognized as stemming from the all-diatonic "King Kong" main melody, though full of dissonants and altered notes (fourth example). The mutation of the sound of standard instruments comes out most strongly in staff 1, with one instrument getting abnormally high.

Other versions of "King Kong", included in this study:

- The "Lumpy gravy" version from 1968 with the melody in 3/8 being played over 4/4.
- The "Prelude to King Kong" has been dealt with above.
- King Kong as played during "Uncle rhexus" gets dealt with at the bottom of this section.
- The "Hammersmith Odeon" version from 1978 with the end of the melody and the opening of the guitar solo.
- The "YCDTOSA vol. III" version with a monumental collage of sections from the 1971 and 1982 tours.
- A fragment from the 1988 execution is included in the Make a jazz noise here section, as also "Diplodocus" can be seen as an outtake from a "King Kong" execution. These sections aren't directly connected to the "King Kong" theme anymore, only the key can be the same.

Handwritten musical score for the opening of "King Kong" album version. The score is divided into three sections: (a), (b), and (I).

Section (a) shows the initial 12-measure introduction in 8/8 time with a key signature of two flats. It includes staves for piano, bass, and drums. Dynamics include *mf* and *p*.

Section (b) continues the introduction with dynamics ranging from *mf* to *pp*. It includes staves for piano, bass, and drums. Dynamics include *mf*, *p*, and *pp*. The word "Repeats" is written in the bass staff.

Section (I) marks the beginning of the main theme in 3/8 time, featuring a "parallel" motif. It includes staves for piano, bass, and drums. Dynamics include *mf* and *mp*.

King Kong, album version, opening bars. Transcription/source: KS/album liner notes (update 2013, deposited at the I-depot, The Hague).

1 2 3

Vln

Vcl

Vla

Vcl

Cb

mf

mf

mf

mp

mp

mp

pp

pp mf pp mf

pp mf pp mf

pp

Bar 3 staff 3 keeps repeating

mf mp pp

As bar 3, staff 5

King Kong, album version, end of the first statement of the theme. Transcription/source: KS/album liner notes (update 2013, deposited at the I-depot, The Hague).

The image shows a handwritten musical score for the 'King Kong' solo section. It consists of several staves:

- Mutated sax:** The top two staves are labeled 'Mutated sax'. The first staff has a key signature of two flats (Bb, Eb) and a 12/8 time signature. It contains a melodic line with a '7' above a note and the instruction 'Etc. (parallel)'. The second staff continues the melodic line.
- Guitar:** The third staff is labeled 'Guitar' and contains a chordal accompaniment with the same key signature and time signature. A bracket on the right side of this staff is labeled 'Keeps repeating'.
- Double Bass:** The fourth staff is labeled 'Prab.' and contains a bass line with a '3-1' bracket under a triplet of notes.
- Additional Staves:** The fifth and sixth staves continue the bass line with various rhythmic patterns, including triplets and a quintuplet (labeled '5').

King Kong, solo section. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

The image shows a handwritten musical score for the "King Kong" section from the outro. The score is divided into two systems. The first system includes parts for "Wind instr" (three staves) and "Gongs" (two staves). The second system includes parts for "Vra" (three staves) and "Gongs" (two staves). The music is in 3/8 time with a key signature of three flats (B-flat, E-flat, A-flat). Dynamics include mp, mf, and mp. There are various musical notations such as slurs, accents, and articulation marks.

King Kong, section from the outro. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

Both "Uncle Meat" and "King Kong" are examples with Zappa composing lengthy melodies where the harmonization of it is of secondary importance. These melodies do get harmonized in scores and on

albums, but it can be different each time. This is an aspect that makes a number of Zappa pieces sound different from most classical music and popular music. Normally melody and chords form a unity in Western music. If you would take a Chopin or Debussy piece, distract the lead melody from it and harmonize it differently anew, it wouldn't sound as Chopin or Debussy any more. But Zappa's music is very flexible as it comes to this. He could put pedal notes and chords beneath his melodies almost at will. Next is a list of the examples in this study of how the score and an album version can differ (next to the numerous differences between album versions among themselves):

- "Arabesque/Toad of the short forest". The harmonies of specifically theme 2 are on paper different from the CD.
- "Brown shoes don't make it". The score in the Songbook from 1973 is closer to the 1981 version on "Tinsel town rebellion" than to the one on "Absolutely free".
- "Uncle Meat". The score from both the Songbook and the album liner notes don't include the counterpoint figure from above. It's more than harmonic fill-in. If you play it with and without it, the difference is decisive for making the opening of the "Uncle Meat" album version sound as it is.
- "Kung Fu". The piano part is not included on "The lost episodes"
- "Nun suit". Album and score go different in many aspects.
- "The girl's dream". The album version and the score differ substantially.
- "Little green scratchy sweaters & courduroy ponce". The rhythm of bar 4 goes different on the album.
- "200 Motels - the suites" is at various points a revised version of the original score. See the 200 Motels section for the details.
- "Big swift". The piano part is not included on "Waka Jawaka".
- "For Calvin". The album and the score start with different harmonizations.
- "Think it over". The keyboard part is not included on "Joe's damage".
- "The new brown clouds (1972)". Some differences are pointed at in the Wazoo section of this study.
- "Variant I". The guitar part is not included on "Wazoo".
- "Farther O'blivion". The piano part is not included on "Imaginary diseases".
- "Rollo interior". The indicated 2-chords are not played on "Apostrophe (')".
- "Little dots". The trumpet part from the CD inner sleeve is not played like that on this CD.
- "Dupree's paradise" (1974). The piano part is not included on "YCDTOSA Vol. II".
- "This town is a sealed tuna sandwich". As indicated in the Orchestral favorites section below the example, the album and score version differ in many details.
- "Greggery Peccary". The keyboard and trombone parts aren't present on the album in full.
- Music for low budget orchestra". Different versions of the same set of bars exist.
- "RDNZL". The chords from the opening got reduced on album. The structure of this song changed drastically over time.
- "The black page drum solo". The percussion part by Ruth Underwood got overdubbed and isn't part of the score.
- "The black page". The indicated 2-chords are mostly not played on CD versions.
- "Dancin' fool". The score and album version differ.
- "Mo 'n Herb's vacation". A few parts got skipped.
- "Sad Jane". Some differences get mentioned in the LSO section.
- "The perfect stranger". As indicated in the corresponding section, there are possibly two versions of the score.
- "Naval aviation in art". Some details on album are different (see the notes below the score).
- "Alien orifice". The harmonies of the score and album version go differently.
- "Get whitey". The "Yellow shark" album version is somewhat reduced.

UNCLE MEAT, THE MOVIE - AHEAD OF THEIR TIME

Epilogue - Agency man

On the album sleeve Zappa informed us about the "Uncle Meat" movie, that we probably would never get to see, stashed away in his basement. The unfinished movie kept lingering around in his mind however. When videos presented themselves as a new sellable medium in the eighties, an opportunity to return to the project was offered. In 1982 some additional taping was done and in 1988 it finally became publicly available. Zappa wasn't satisfied with only the video and wanted to incorporate the movie in the CD as well. "Uncle Meat" thus became a double CD including 40 minutes of dialogues and a new song, "Tengo na minchia tanta", recorded during the 1982 session. The concert parts, included in the movie, were among others the little play from the gig at the Royal Albert Hall from 1968. About 70 minutes of this concert, including the play, were released in 1993 as "Ahead of their time".

The image displays a handwritten musical score for the piece "Epilogue - Agency man". The score is written on four systems of staves, each system containing a treble and bass clef staff. The first system is marked "Moderately fast" and "mf". The second system includes a key signature change to B-flat major (Bb) and a dynamic marking of "mp". The third system is marked "Faster" and "mf". The fourth system continues the piece. The notation includes various rhythmic values, accidentals, and dynamic markings, characteristic of Frank Zappa's complex and often unconventional musical style.

Epilogue, opening. Transcription: KS (3rd printed edition, 2007).

The image shows a handwritten musical score for a section titled "Agency man". The score is written on three systems of staves, each containing a bass line, a guitar line, and a drum line.

- System 1:**
 - Bass:** Starts with a 3/4 time signature. Lyrics: "Sells us...".
 - Guitar:** Features a melodic line with a "Bva" (bend) annotation.
 - Drums:** Includes a pattern of eighth notes with the word "Etc." written below.
- System 2:**
 - Bass:** Lyrics: "Asbari Asbari".
 - Guitar:** Contains a complex melodic passage with a "Bva" annotation and a "3-7" interval marking.
 - Drums:** Shows a steady eighth-note pattern.
- System 3:**
 - Bass:** Lyrics: "What! This?".
 - Guitar:** Features a melodic line with a "Bva" annotation and a "tr" (trill) marking.
 - Drums:** Shows a pattern of eighth notes with a "*" symbol.
- System 4:**
 - Bass:** Lyrics: "Let's try California. But first...".
 - Guitar:** Contains a melodic line with a "Bva" annotation and a "3-7" interval marking.
 - Drums:** Shows a pattern of eighth notes with a "*" symbol.

Agency man, section. Transcription: KS (3rd printed edition, 2007).

For the occasion members of the BBC Symphony Orchestra were hired to play several modern chamber music pieces. Various material from these tracks would later re-appear in the scores for "200 Motels" (the album) or "200 Motels - the suites", though in much different forms. The first half minute from "Epilogue" is presented above. It has a tempo change for the second theme, at the part where the meters keep changing. In bars 1-6 4/4 and 6/4 are used as meters, while the scales keep changing. In bars 6-10 all meters are different and odd-numbered. The scale here however is constantly Ab. In his discussion with me B. Clement calls it Db Lydian. There is a Db pedal in bar 4, but it doesn't get maintained, nor does it return. "Horizontally" one might say bar 5 is step II from Db Lydian and bars 6-10 are step V. But vertically bars 6-10 are stable upon Ab. See the next section for the terms horizontal and vertical. "Agency man", about how to promote a president to the voters, precedes it. It's a piece you might call a pastiche, opening with Don Preston improvising a cadenza on a concert piano over the central theme. He keeps playing piano when the first theme starts, using several style elements from classical piano concerts like arpeggio's, tremolos and ornaments. This first theme in C is in a straightforward waltz rhythm, the second is a simple march, giving the instructions for the president's campaign speechwise singing.

The rejected Mexican pope leaves the stage

The image shows a handwritten musical score for a piece titled "The rejected Mexican pope leaves the stage". The score is written on a system of staves. At the top left, there is a boxed number "22". The score is divided into two main sections: "Piano/Celeste" and "Brass".

- Piano/Celeste:** This section consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The music is written in a 3/8 time signature. The notes are mostly eighth and sixteenth notes, with some rests. There are several accidentals (sharps and flats) throughout the piece.
- Brass:** This section consists of four staves. The top two staves are in treble clef and the bottom two are in bass clef. The music is written in a 3/8 time signature. The notes are mostly quarter and eighth notes, with some rests. There are several accidentals (sharps and flats) throughout the piece.

The score is written in a clear, legible hand. There are some annotations, such as "with strings" written above the first staff of the Brass section. The overall style is that of a working draft or a composer's sketch.

Piano

Strings

Brass

Handwritten musical score for Piano, Strings, and Brass. The Piano part features a melodic line in the right hand and a bass line in the left hand. The Strings part consists of sustained chords. The Brass part includes a melodic line for the upper brass and a rhythmic pattern of eighth notes for the lower brass.

Flutes

Woodwinds

Brass

29

Two three four five, One two three four, One two three four five, etc. --

Handwritten musical score for Flutes, Woodwinds, and Brass. The Flutes part has a melodic line. The Woodwinds part includes parts for Clarinet, Saxophone, and Bassoon. The Brass part features a rhythmic pattern with counting cues: "Two three four five, One two three four, One two three four five, etc. --".

Handwritten musical score for a full orchestra, featuring parts for Flute, Strings, Woodwinds, Brass, and Percussion. The score is written in a single system with five staves.

Flute: Treble clef, 5/8 time signature. Melodic line with notes: G4, A4, B4, C5, B4, A4, G4. Chords: 4# (F#4, G#4), 7 (G4, A4, B4, C5).

Strings: Treble clef, 5/8 time signature. Chords: 5 (G4, B4, D5), 7 (G4, B4, D5, F#5).

Woodwinds: Two staves. Treble clef, 5/8 time signature. Bass clef, 4/8 time signature. Melodic lines with notes: G4, A4, B4, C5, B4, A4, G4. Chords: 5 (G4, B4, D5), 7 (G4, B4, D5, F#5).

Brass: Treble clef, 5/8 time signature. Bass clef, 4/8 time signature. Melodic lines with notes: G4, A4, B4, C5, B4, A4, G4. Chords: 5 (G4, B4, D5), 7 (G4, B4, D5, F#5).

Percussion: Bottom staff with rhythmic notation (x) and a note with an accent (>). Includes the instruction "One two." with a dashed line above it.

Time Signatures: 5/8, 4/8, 5/8, 4/8, 7/8.

37

The image shows a handwritten musical score for a chamber ensemble. The score is divided into three main sections: Piano, Woodwinds, and Brass. The Piano section consists of two staves. The Woodwinds section consists of two staves. The Brass section consists of four staves, including a tuba line at the bottom. The music is written in 7/8 time and spans three measures. The notation includes various rhythmic values, accidentals, and dynamic markings.

The rejected Mexican pope leaves the stage, section. Source/transcription:

- Piano/celeste part: original score, see below.

- Everything else transcribed by KS.

Update Spring 2016, deposited at the I-depot, The Hague.

Next is a section from "The rejected Mexican pope leaves the stage". I could use page 1 of the piano/celeste part of the original score in Zappa's handwriting, that I recently came across on the net as to be auctioned. Above it's complemented for the chamber ensemble, playing it on this occasion.

piano and celeste were playing their two parts in parallel octaves, but now the intervals between the parts start varying:

- The notes of the first four ticks are all played as augmented fifths.
- The fifth tick is played as a fifth.
- The sixth tick is played as a major third.
- The seventh tick is played as a tritone.
- The eighth tick is played as a major third.
- The ninth tick is played as a fifth.
- The eighth tick is played as a major third.

Both piano parts are moving up and down in the same directions in an irregular way. So this is about shifting harmonies.

0:45 Bars 27-28. A broad sustained chord, fading out. The drums/percussion part is articulately playing in 5/8.

0:50 Bars 29-36. This is a larger section with 5/8 and 4/8 bars alternating. The players are counting the beats aloud. Possibly Zappa had some choreography in mind for these bars when he wrote them, but this is not happening during the "Uncle Meat" movie. Bars 29-32 form a sequence: the short melody/motif of bar 29 gets varied upon three times. During bars 33-35 brass instruments are playing their own melody lines. In bar 36 the little melody of bar 29 gets varied upon one more time.

1:06 Bar 37. The meter changes to 7/8 and the brass players are taking over with thirds and fourths in the descant and various harmony notes.

1:10 Bar 38-39. The meter changes again. These two bars form a resting period with playing around the progression E - Esus4 with D as a pedal note beneath it. It's one of many examples showing that Zappa loved the sound of extended chords. While the example so far has been atonal, you are here having a brief diatonic intermission in D (major or Mixolydian).

1:16 At this point the example from above stops, so only the outlines of the remainder are briefly sketched. The ensemble continues with modern atonal music.

1:21 Now sections from "200 Motels" can be recognized again. As already said in a much different form.

2:02 Saxophone improvisation by Motorhead Sherwood.

2:21 The ensemble interferes.

2:52 Zappa speaks through his megaphone: "Undaunted the band plays on".

2:54 End.

Other tracks from Ahead of their time

- "Holiday in Berlin": see the Movie scores section for the "Burnt weeny sandwich" studio version.
- King Kong (live): see above and below for the themes of this song.
- "Help, I'm a rock": see the Freak out! section for the 1966 studio version.
- "Transylvania boogie": see the Chunga's revenge section (including this specific live version).
- Pound for a brown - Sleeping in a jar: here these two pieces are played after each other as "The string quartet". They are also played on "Uncle Meat" (above), where the link to Zappa's teens is included for examples.
- The studio version of "Let's make the water turn black" first appeared on "We're only in it for the money". Another live version is included in the Best band you never heard in your life section.
- The orange country lumber truck: see the Weasels ripped my flesh section for a small outtake from the guitar solo.
- "Oh no": see the Lumpy gravy section for the 1967 studio version.

To the right an outtake from the elaborate Cal Schenkel drawing for the CD, referring to the law suit between Zappa and former members of the Mothers of Invention. The argument concerned their royalties when Zappa started releasing material from his tape archive.

THE ARK, 1969 (FINER MOMENTS)

Uncle Rhebus

In 1969 the band had been playing "King Kong" and "Uncle Meat" for over a year and for the The Ark concert of July 1969 Zappa decided the band should play it in a really weird manner. "Uncle Meat" was released in April 1969, so the audience may have understood what was going on. The band namely played these tunes simultaneously without attempts to adjust the themes to each other. So you get the effect Charles Ives always gets quoted for: the effect of listening to two bands approaching each other and playing different tunes. The track the ZFT released as "Uncle Rhebus" on their 2012 "Finer moments" CD partly overlaps with the "Uncle Meat/King Kong medley" from the "The ark" bootleg from the "Beat the boots" series. Both contain this medley and the set-up goes as:

The Ark: Uncle Meat/King Kong

- 0:00 Introduction by Zappa: "King Kong? Well I tell you what... I think what we are gonna do is play Uncle Meat and then, uh, sort of sneak into King Kong from that. It would be your teenage medley of two".
- 0:25 Uncle Meat main title.
- 3:31 Uncle Meat outro, specific for this CD.
- 3:48 Drum solo.
- 6:06 King Kong main theme.
- 7:15 Solo over the Eb pedal from King Kong.
- 8:21 Theme #2 from King Kong => 0:00 on Finer Moments.

Finer Moments: Uncle Rhebus

- 0:00 Theme #2 from King Kong. For the 1968-9 tours the Mothers of Invention played a second theme on their King Kong performances. It can also be heard on Ahead of their time. This second theme is not related to the main theme from King Kong. It's both rhythmically and harmonically pretty complex. It starts in C Dorian for bars 1-4, continuing in C minor for bars 5-6. At the end of bar 6 it looks like Zappa might want to evade to Eb. Bars 1-4 are in regular 12/16. The theme first gets played unisono, next with the players following their own lines. Thus in bars 3-4 it becomes a chord progression. For bars 5-8 the meters and rhythm get more complicated. These bars contain strings of 16th and 32nd notes. I've included the drum beats in bars 7-8, so that the notation becomes better comprehensible. In bars 7-8 you get dissonant harmonies as C-Db-Eb-G in bar 7 and Db-Eb-F-G in bar 8. In these bars the scale has become Db Lydian.

- 1:16 Solo in Eb Dorian over bass vamp #1 (this vamp gets represented in the examples below).
- 4:02 King Kong/Uncle Meat medley. While the bass vamp #1 continues, Uncle Meat enters the picture. It comes in as if it were still in D as above on the Uncle Meat CD. But without the D bass pedal you can't actually call it D anymore. The Eb Dorian vamp belongs to the key King Kong is in. Uncle Meat changes scales a couple of time. Zappa could have transposed the opening of Uncle Meat to Db, so that it would be in line with Eb Dorian for its use of notes, but that would only work for the opening bars. While the Uncle Meat part follows the melodic notes of the original with an amount of freedom, the rhythm is here much irregular. It's an improvised jazz manner of playing this theme. By ignoring much of the rhythm of the bass vamp and using a different key, Uncle Meat sounds as a stranger here. Because of the distance of around two octaves between bass and descant, the dissonants don't sound that sharp for as long the King Kong lead melody hasn't entered the picture.

The second example below contains the second block from Uncle Meat. Here Uncle Meat and King Kong switch roles. The bass vamp, using only Eb-Bb-Ab, is now in line with the Eb major scale of this Uncle Meat section. So when the King Kong melody returns in bar 3, the effect here is that King Kong sounds as

the stranger. Uncle Meat and King Kong now have a common tonic, so here you can say that Zappa mingles Eb major and Eb Dorian. Be aware of the notation in the two examples below. Uncle Meat and King Kong use their own different keys.

The image displays two systems of handwritten musical notation for the 'Uncle Rhexus' section. The first system consists of four staves: a guitar staff (top), a bass staff, and two drum staves. The guitar and bass parts feature complex rhythmic patterns with many beamed notes. The drum part is divided into two sections labeled 'Asbar 1' and 'Asbar 2'. A tempo marking 'A bit slower' is written above the second system. Measure numbers 15 and 32 are indicated at the end of the first and second systems respectively. The second system includes a drum part with 'x' marks, likely representing a specific drumming pattern or a different drum set configuration.

Uncle Rhexus, section. Transcription: KS (update 2013, deposited at the I-depot, The Hague).
 Note: the meters in this section can best be followed by watching the version from the BBC performance (see the image from this show, on-line version), looking at Jimmy Carl Black and Motorhead Sherwood.

Handwritten musical score for a medley section, featuring two instruments: Uncle Meat and King Kong. The score is divided into four systems, each with three staves. The key signature is one sharp (F#) and the time signature is 6/8.

System 1:

- Staff 1 (Uncle Meat): *Uncle Meat, so merubato*
- Staff 2 (King Kong): *King Kong*
- Staff 3 (King Kong): *Repeats*

System 2:

- Staff 1 (Uncle Meat): *Uncle Meat*
- Staff 2 (King Kong): *King Kong*
- Staff 3 (King Kong): *As bar 4*

System 3:

- Staff 1 (Uncle Meat): *Uncle Meat*
- Staff 2 (King Kong): *King Kong*
- Staff 3 (King Kong): *Repeats*, *As bar 4*, *Repeats*

System 4:

- Staff 1 (Uncle Meat): *Uncle Meat*
- Staff 2 (King Kong): *King Kong*
- Staff 3 (King Kong): *King Kong*

Additional annotations include a bracketed measure labeled "15:14" in the third system and the instruction "(Bass continues)" at the end of the fourth system.

Uncle Rhebus, medley section. Transcription: KS (update 2013, deposited at the I-depot, The Hague).
 Note: be aware that the staves are notated in different keys.

Handwritten musical score for 'Uncle Meat' and 'King Kong' sections. The score is divided into two systems. The first system, labeled '1', shows 'Uncle Meat' (top two staves) and 'King Kong' (bottom two staves). The second system, labeled '5', shows 'Uncle Meat' (top two staves) and 'King Kong' (bottom two staves). The 'King Kong' section includes a handwritten note: '(Bass continues like bar 4)'. The score includes various musical notations such as notes, rests, and dynamic markings.

Uncle Rhebus, medley section. Transcr. KS (update 2013, deposited at the I-depot, The Hague).
 Note: be aware that the staves are notated in different keys.

- 5:36 Outro of the medley.
- 6:39 Interlude with bass vamp #2 with a I-III-IV progression in Eb Dorian played over it.
- 7:09 Slower progression with I-IV-III-I. The soloing in Eb Dorian restarts.
- 7:34 The accompaniment turns into a I-IV alternation in Eb Dorian.
- 11:17 Riff like the one included in Didya get any onya (the first one from the Weasels section in this study). Playing this riff after a signal from Zappa was one of the routines the Mothers did. It could turn up at any moment.
- 12:01 A solo by Zappa, released as "Baked-bean boogie" on YCDTOSA vol. V (see the Weasels ripped my flesh section).
- 15:29 Music to be included in the later 200 Motels scores. This section also got released as an individual track on YCDTOSA vol. V, this one with the title "Piano/drum duet".
- 17:45 End.

HOT RATS: OVERDUBS

Jazz played a bigger role in Zappa's next release "Hot rats" (recorded in 1969 and released in 1970). It's an album sometimes referred to as jazzrock, not so much because it combines rock 'n roll with jazz, but because it uses electric as well as acoustic instruments. It's a carefully balanced album with six almost entirely instrumental pieces:

- "Peaches en regalia" and "Son of Mr. Green genes". Two relatively relaxed pieces.
- "Willie the pimp" and "The Gumbo variations". Tracks based upon a riff followed by extensive soloing.
- "Little umbrellas" and "It must be a camel". Complicated music with various interwoven melodic lines. Especially "It must be a camel" is harmonically versatile.

The album shows the synergy of the cooperation between Zappa and Ian Underwood. Ian Underwood made his first appearance on "We're only in it for the money" and pleased Zappa by being able to play all kinds of complicated music, taking away some limitations Zappa had had to deal with earlier. Underwood got stimulated to reach the level he's demonstrating in his saxophone soloing in "The Gumbo variations". The majority of the parts of "Little umbrellas" and "It must be a camel" are played by Underwood, where Zappa is applying a lot of overdubbing.

HOT RATS

1. Peaches en regalia

"Hot rats" has two songs that have a scent of the classical sonata form for a single movement, namely "Peaches en regalia" and "Little umbrellas" (tracks 1 and 4). They both have repeated themes at the opening, which return at the end. In between is a block that has a more free variation set up, with new themes related in character to the opening themes (more on this subject in the "Orchestral favorites" section). The main scale of "Peaches en regalia" is B Dorian, but it's one of many examples with a multitude of modal scales passing by. For themes I and II Zappa is using 4/4 with standard rhythms. He continues in 4/4 for the third theme, but here the rhythm gets more complicated: an irregular form of a string of 16th notes with pauses in between them, followed by a syncopic bar. The set-up of the complete song can be followed in the Hot rats guitar book (see below for samples), using the block indications from their score:

Themes

0:00 Block A (bars 1-2 in the example below). Theme I in B Dorian.

0:21 Block B (bars 5-8 in the example below). Theme II in B minor. See also the Tinsel Town rebellion section for more details about this section, where it re-appears as "Peaches III".

0:41 Block C (bar 13 etc.). Third theme. This theme begins with a two-bar motif in B Dorian. Hereafter this motif gets transposed twice, as D Dorian and F Dorian. Next you've got another motif in Db Mixolydian, followed by yet another motif in B Mixolydian.

Middle block

1:05 Blocks D-E. The song continues in an improvised manner. A melody is played over a I-II alternation in E, followed by a I-VII alternation in A Lydian.

1:34 Block F. A melody over a chord progression, using two different scales per bar and ending in G Mixolydian.

1:46 Block G. Chord progression in F, being I-V-IV.

2:05 Block H. Variation upon the material from block F, beginning with the first bar transposed down a minor third.

Return of the themes

2:16 Block I goes like block A.

2:35 Block J goes like block B.

3:37 End.

Peaches en regalia, opening. Transcr. Wolfgang Ludwig/Andy Aledort (bass added by KS).

Note: I miswrote myself in the pdf and printed versions for the chords in bar 6: Cm-5 and Cm should be F#m-5 and F#m.

"Peaches en regalia" has become a Zappa classic in another sense as well. It's generally appreciated and Zappa recorded it three times. In 1971 Flo and Eddie did some of the parts vocally for the live version on "Fillmore East". Ten years later another live version appeared on "Tinsel town rebellion", called "Peaches III". To quote Zappa from the album liner notes: "It is called Peaches III because this is the third time I have released Peaches (En Regalia) on record ... first on the Hot Rats album, then on Live At The Fillmore ... but this version is so bizarre, I figure you wouldn't mind hearing it again". The bizarreness doesn't so much relate to the composed part as on "Hot rats", but more to the epilogue with the "Let's hear it for another great Italian" section followed by the concert ending lines. See the Tinsel town rebellion section for an outtake from this version. "Peaches III" has some extra counterpoint figures at the return of theme B, that also appear as pizzicato notes in the Ensemble Modern version on their "Greggery Peccary and other persuasions" CD from 2003 (see the left menu for more about this CD). Image above to the right: Zappa during the recording of Hot rats (sample from the album cover).

2. Willie the Pimp (1970)

"Willie the pimp" exists in three versions in Zappa's catalogue. On "Hot rats" it's the only track with lyrics, having Captain Beefheart singing them.

Hot rats

- 0:00 Main theme, introduced instrumentally. Next Beefheart starts with the lyrics ("I'm a little pimp with my hair gassed back ...").
- 1:07 Shorter sung side theme ("Hot meat, hot rats, hot cash, hot ritz ..."). The bass starts varying the main theme, gradually moving towards a free improvisation, though maintaining an A pedal type of accompaniment (the song is in A Dorian throughout). Zappa starts soloing.
- 2:13 The piece continues instrumentally.
- 8:48 The main theme returns.
- 9:16 End.

Fillmore East, June 1971

- 0:00 2nd appearance of the "Latex solar beef" theme. As I understand it there are other releases with this section being part of "Latex solar beef" itself. My CD has Rykodisc RCD 10512 as release number.

- 1:01 Main theme from "Willie the Pimp" (1971), played instrumentally as in the example included in this study. While the "Hot rats" rendition is melodic, this version contains a chord progression as well. Because the side theme from above is textual rather than melodic, it doesn't return in this version without lyrics.

- 1:31 The main theme is used as the starting point for a guitar solo, called part one of it. Part two was the opening track of side two of the original album edition, but got skipped on the CD re-release.

- 4:03 End.

YCDTOSA vol. IV

- 0:00 Main theme.

- 0:21 Additional theme ("she can't be (beat) ...").

- 0:31 The main theme and additional theme get repeated.

- 0:51 Main theme some more, followed by the side theme from above, this time with a fixed accompaniment figure.

- 1:05 Guitar solo over an inversion of this figure.

- 1:57 The solo ends with the opening melody from "Montana", into which song this track segues.

- 2:05 End.

1 Guitar

4

Willie the Pimp solo, section. Transcr. KS/Andy Aledort.

When you compare the solo example from above - or pages 15-29 from the Hot rats guitar book - with the Frank Zappa guitar book from 1982, you can see that the solo from "Willie the pimp" is untypical of Zappa. This goes for more solos from the sixties. There are relatively few of them on album and Zappa hadn't yet developed his personal style as explicitly as at the end of the seventies. In this case he's about always following the downbeat and playing on beat too. The 16th note is the central time unit and there are few accelerations and irregular rhythmic groupings (apart from triplets). There are many bars with him using chords (as in the example from above), something he would call a "rhythm guitar solo". See the "Chunga's revenge" solo from 1975 from the Joe's series section from this study for a clear example of such a rhythm guitar solo. Technically and, as it comes to variation, the existence of these solos is of interest. I'm also addressing to the difference between earlier and later solos in the Fillmore East 1970 section of this study as it comes to the interaction between players. In this case the contribution of Max Bennett on bass is of importance. At some points it sounds as if Zappa and Bennett are playing a duet. On the other hand the keyboard part stays in the background, being a sustained pianissimo Am chord most of the time.

3. Son of Mr. Green Genes

"Son of Mr. Green Genes" first appeared on "Uncle Meat" as just "Mr. Green Genes", at that point a song with lyrics. On "Hot rats" it's all instrumental. The theme and the soloing follow a chord progression all through:

- I-IV alternation in D Dorian.
 - I-VI alternation in C, followed by IV-V-VI.
 - Ending in Bb Mixolydian or Bb Dorian (both D natural and Db are getting used).
- Ultimately, at the end of this piece, it's closing in D Mixolydian.

Guitar transcriptions from most parts from "Hot rats" have been published as the Hot rats guitar book, Hal Leonard publ. comp., Milwaukee, 2001. The transcriptions are by Andy Aledort. Above are the opening bars of the soloing over the I-IV alternation in D Dorian.

In his response to me you can read that Brett Clement doesn't agree with my inclusion of Mixolydian:

- "Not Bb; Zappa does many different things over the Bb chord; overall, it is consistent with blues minor pentatonic playing."

- "The D major chord at the ending is just a "Picardy third" in D minor."

Following the transcription by Andy Aledort you're having the following over the Bb chord/Bb pedal:

- Page 31: Bb-C-D-Eb-F-Ab
- Page 32: Bb-D-E-F-G-A
- Page 34: Bb-D-F-G-A
- Page 35: Bb-Db-Eb-F-A/Ab
- Page 36: Bb-Db-Eb-F-Ab
- Page 37: Bb-C-D-E/Eb-F-G
- Page 38: Bb-C-D-Eb-F-G-Ab
- Page 39: Bb-C-D-Eb-F-G-Ab
- Page 40: Bb-Db-F-A/Ab
- Page 41: Bb-Db-E/Eb-F-Ab
- Page 42: Bb-Db-Eb-F-Ab

Bb Mixolydian = Bb-C-D-Eb-F-G-Ab.

Bb Dorian = Bb-C-Db-Eb-F-G-Ab.

Bb minor Pentatonic = Bb-Db-Eb-F-Ab.

None of these three scales overall fits, but standard Mixolydian is happening on pages 38 and 39.

Specifically on page 38 you can see a playing up and down the Mixolydian scale. The frequent switch to Db adds a Dorian element to it. Pentatonic happens too on pages 36 and 42. The Picardy third stands for letting a composition in minor/Dorian end with a major triad upon the tonic instead of a minor triad. In this case the effect is less, because the second half of the scheme involves major. But related to the Dorian part you could call it that way. When you do, it doesn't mean it becomes wrong to say the last bar is in D Mixolydian. It's not just the D chord, but playing through the complete Mixolydian scale.

⊕ Coda

The musical score for the Coda of "Son of Mr. Green Genes" is written for three guitars and one piano. It begins with a Coda symbol and a common time signature. The key signature is D minor. The score includes a "Free time" section. Chord indications include C and D5. Performance instructions include "poco rit.", "divisi", and "Gtrs. 2, 3 & 9 tacet". The final bar has a bass pedal note D.

The coda from *Son of Mr. Green Genes* (*Hot rats guitar book*, page 42). The bass pedal note in the final bar is D.

4. Little umbrellas

In the case of "Little umbrellas", the sonata-like construction goes as:

- 0:00 Theme A, played twice.
- 1:05 Theme B.
- 1:12 Middle block.
- 2:17 Theme B returns.
- 2:31 Theme A returns.

Ludwig's study has the main melody of "Little umbrellas", whereas about 2/3rd of "Hot rats" got transcribed in 2001 by Andy Aledort (the "It must be a camel" section from below was published just before this release). Andy also includes the main melody of "Little umbrellas", but skipped the middle block. Apart from Zappa's own solos he doesn't include the overdubbed and improvised parts, other than by chord indications. For a cover band that could be enough. This section is about overdubbing and the on-line midi files are intended to approach the exact album versions, so more details are included.

This first example below contains the repetition of theme A plus the larger part of theme B. The first two bars are accompanied by a Dsus2 and Fm7 chord progression. Both Wolfgang Ludwig and Andy Aledort are notating "Little umbrellas" in D minor. If you want to relate this song to any key, then D minor or Dorian is indeed the only option. The D-F movement dominates. You've got a lot of altered notes that way though. In the 4th pdf edition of this study I'm suggesting that the scale over the Dsus2 chord could be interpreted as D major, but after re-listing I would like to withdraw that. The D chord I first notated should be Dsus2 and the bass line plays a C right from the beginning. So, without an F#, there's insufficient ground for doing so, and the C# in the melody should be interpreted as a chromatic passing note. Bars 5-6 have varying pedal notes and incomplete scales, so the scales can't be identified positively (it's also hard to hear each individual note here). The piano plays the extended chords in improvised arpeggio forms (staves 2-3). Bar 7-8 don't follow a specific key. Bars 9-10 are stable again, here in A minor. The main theme is played three times, each time sounding different. The basic notes of the melody are identical each time, but the overdubs create a different harmonic climate in every repetition of the theme. In bar 11 of theme B the overdubbed line is playing a counterpoint line. It's getting chromatic here with only fragments of scales being used.

Handwritten musical score for a piece in 4/4 time, consisting of two systems of staves.

System 1 (Measures 1-3):

- Staff 1 (Melody):** Starts with a circled measure number '1'. Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mf*.
- Staff 2 (Piano):** Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mp*. Labeled "As bar 1".
- Staff 3 (Piano):** Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mp*.
- Staff 4 (Bass):** Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mf*.
- Staff 5 (Bass):** Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mf*.

System 2 (Measures 4-6):

- Staff 1 (Melody):** Starts with a circled measure number '4'. Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mf*.
- Staff 2 (Piano):** Labeled "As bar 1". Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mp*.
- Staff 3 (Piano):** Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *pp*.
- Staff 4 (Bass):** Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mp*.
- Staff 5 (Bass):** Contains a triplet of eighth notes, followed by a quarter note, a half note, and a triplet of eighth notes. Dynamics: *mp*.

The score includes various musical notations such as triplets, slurs, and dynamic markings (*mf*, *mp*, *pp*). The piece concludes with a circled measure number '6' at the end of the second system.

Handwritten musical score for "Little umbrellas, section". The score is written on ten staves. The first system (measures 7-9) features a complex melodic line in the top staff with triplets and sixteenth notes, and a bass line with a steady eighth-note pattern. The second system (measures 10-12) continues the melodic development with more triplets and a dense harmonic texture in the lower staves. Dynamics include mp, mf, and p. The score includes various musical notations such as slurs, accents, and fingering numbers (3, 6, 4, 5).

Little umbrellas, section. Transcription: KS (main melody and chords by Wolfgang Ludwig and Andy Aledort). Update 2010, deposited at the I-depot, The Hague.

The middle block of "Little umbrellas" is a strong example of overdubbing, because Ian Underwood is playing three keyboard parts with individual lines. The bass is setting a pedal note per bar. The result is dense harmonies and counterpoint, difficult to transcribe. Next is the section from this middle block between 1:20 and 1:35.

The image shows a handwritten musical score for a fragment of 'Little umbrellas'. The score is written in 4/4 time and consists of two systems of staves. The first system includes two flute parts (labeled 'Flva'), a piano part (labeled 'Pva'), and a bassoon part (labeled 'Pva bassa'). The second system includes two flute parts (labeled 'Flva'), a piano part (labeled 'Pva'), and a bassoon part (labeled 'Pva bassa'). The music features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. The key signature is one sharp (F#). The score is written in a clear, legible hand.

Little umbrellas, fragment. Transcription: KS (update 2010, 3rd printed edition 2007).

This middle block is built over an eight bar progression with a chord per bar, repeated twice, as indicated in Andy's songbook. Included above are the first four of these bars with the progression E-F#-G-A. Over these chords two or three melodies are played, moving freely through the scales, that change per bar (E, F#, G and A Mixolydian). In the example above however bar 4 appears as A minor/Phrygian (the C/C# is absent, the F is natural while the B turns up as natural and flat). Thus the whole becomes to sound as a series of harmonic fields, blending all notes of a scale in each bar.

5. The Gumbo variations

The musical score is written in 4/4 time and consists of two systems of staves. The first system contains measures 1 through 4. Measure 1 is marked with a circled '1' and a box. Dynamics include *pp* and *mp*. The second system contains measures 5 through 8. Measure 5 is marked with a circled '5'. Dynamics include *mf* and *mp*. The score includes various musical notations such as chords, melodic lines, and fingerings. Annotations include "Keeps Repeating", "As bar 9", and "(Bass keeps repeating)".

The Gumbo variations, 0:13-0:46. Transcription by Andy Aledort, with some details added to it by KS.

The "Gumbo variations" is the largest piece on the album, 16 minutes in total, including extensive soloing. Its central theme is a two-bar riff, that gets varied upon a couple of times (see bars 9-10 of the first example for its introduction).

Motifs taken from this theme turn up during the sax solo as well as forming a returning element in the guitar accompaniment. It gets preceded by one of the many bass riffs that you can find in this song. During bars 9-14 this bass riff keeps playing against the central theme. The opening contains the principal chord progression that accompanies the lead melody and the soloing: G7-C-G, a standard progression with the dominant 7th chord resolving. As you can read in the "Real FZ book", Zappa didn't particularly like the idea of resolving chords, but he didn't oppose it altogether neither. You can see the same progression at the beginning of "I was a teenage maltshop" and as part of the "Cheap thrills"/"No, no, no" accompanying chords. For examples of the use of the dominant 7th both resolving and non-resolving, see the Frank Zappa songbook vol. I, pages 22-23 and 70. At the other side of the spectrum you have for instance the chord alternation from "Black napkins", C#m7-Dmaj7. Here the two 7th chords not only don't resolve, but change scales as well.

Interesting to see is the simultaneous use of two scales. The "Gumbo variations" start in G Mixolydian. This basis continues when the central theme enters the picture, but both this theme and most of the soloing are using a Bb instead of a B. So Zappa is here blending G Mixolydian and G Dorian.

This second example is a section from this song with the band modulating. It's the part with Don "Sugarcane" Harris playing an electric violin solo. In bar 4 the guitar plays a progression using Bb, setting the key more clearly to G Dorian. Max Bennett on bass comes up with another syncopical riff. He immediately modulates to D minor from bar 5 onwards by changing the pedal note. In bar 12 we're back at G Dorian with simply G as a bass pedal note.

14 Violin

mf

p (vague)

As bar 1

As bar 1

mf

17

mf

p

mf

p

20

mf

p

mf

p

23

mf

p

mf

As bar 9

fvab.

Previous page: The Gumbo variations, 9:40-10:05. Transcription: KS (chords mostly as indicated by Andy Aledort). 4th Printed edition, 2012.

6. It must be a camel

The overdubbing reaches a climax by creating a modern orchestral atmosphere in the intriguing part between 1:45 and 2:25 on "It must be a camel". I've transcribed 11 bars below. Because of its harmonic density the transcription can only be an approximation of what's going on. These bars are also an example of Zappa's search for rhythmic diversity. Within a 3/4 framework several varieties are being used. Several bars have syncopic figures, some bars have a subdivision into two, while bar 8 is straight.

The image shows a handwritten musical score for the section "It must be a camel". The score is written on ten staves, organized into two systems of five staves each. The top system includes a treble clef staff with a 3/4 time signature, a bass clef staff, and two piano staves. The bottom system includes a treble clef staff, a bass clef staff, and two piano staves. The notation is dense and complex, featuring many accidentals, triplets, and syncopated rhythms. There are handwritten annotations such as "basic drumset pattern" and "etc." in the lower left of the first system. The score is a transcription of a piece by Frank Zappa, showing a high level of harmonic and rhythmic complexity.

It must be a camel, section. Transcription: KS (2nd printed edition, 2001; some details renewed in 2014).

Bar 1: Most sections begin with a little arpeggio chord. This section starts in A (major or Lydian) and almost immediately falls into a 13th chord by extending the A chord with a B and an F#.

Bar 2: In the second bar the key changes to G# Dorian. The changing of scales and the use of enlarged chords continue except for bars 9 and 10, which are normal and form a short break. In both bar 1 and 2 the parts are playing via counterpoint and harmonic complementary lines.

Bar 3: G Phrygian. The descant moves on with parallel fourths on beats 2-3.

Bar 4: F Aeolian. On the left and right channel you can hear two different strings of fast notes played simultaneously.

Bar 5: G Aeolian or Dorian. The last string from bar 4 leads to another extended chord. Some more parallel fourths lead downwards to bar 6.

Bar 6: Two extended chords alternate in a syncopic manner. For the remainder of this example there are no clear pedal notes anymore.

Bar 7: The opening chord returns a 16th note behind the meter line. Two other chords lead to bar 8, again in a syncopic manner.

Bar 8: The descant sustains a chord, while the bass plays six triads as a series of plain eight notes.

Bar 9-10: The 3/4 meter gets subdivided into two. Here the descant is briefly using single notes instead of chords.

Bar 11: Yet again an extended chord, here with a tremolo on top of it.

The image shows a musical score for guitar and bass. The guitar part (top staff) is marked with a box 'A' and 'Slow ♩ = 69'. It starts with a guitar pickup icon and a 'mf' dynamic. The chords are: Fmaj9, Csus2, B♭sus2, A9sus4, and Gsus4. The bass part (bottom staff) starts with a 'mf' dynamic and features chords: D7sus4, D9 (no3rd), Csus2, B7sus4, Asus2, and E♭sus2. The guitar part includes a tremolo effect on the final chord.

Opening chords from "It must be a camel", showing the use of sus2, sus4 and 9th chords (Hot rats guitar book). These in traditional harmony uncommon chords set the atmosphere of the song. It opens gently with the keyboard and bass playing.

HOT RATS SESSIONS

In December 2019 the ZFT released a multi-CD box, called "The Hot rats sessions". This box will be dealt with in the next update. The part below of this page is about available material from the "Hot rats" sessions before this last ZFT release. It probably will have to be entirely re-written because of the mass of new information coming from this new "The Hot rats sessions" box. To the right: Frank and Gail, around 1969.

In the LP era the length of an album and its format could sometimes be a problem. A contractual side was expected to last between 15 and 20 minutes, some minutes over 20 being possible. Since the latter diminished the sound quality, Zappa avoided that. Then the next size step from a single album was a double album. An EP or a blank side as a way in between never got popular. You can see that for strongly conceptual albums as "Joe's garage" and "Thing-Fish" choices had to be made. In the case of "Joe's garage" the story ends with "Watermelon in eastern hay", leaving still half of a side remaining. It was

solved by including the "Little green rosetta" jam. For "Thing-Fish" the quantity of the play got between a double and a triple album. It could fit on a double album, but then you would for instance be forced to cut "The torchum never stops" into two. In this case Zappa made no concessions and chose for six short sides, shorter than normal. With the entrance of the CD this problem belonged to the past.

In the case of "Hot rats" the recording sessions resulted in a lot more than what's on the original album. In this case we got to hear the overflow unaltered later on. Normally Zappa would record the unreleased material anew, so that it would fit better on later albums. The additional material from the 1969 "Hot rats" sessions is:

- Chunga's revenge: Twenty small cigars.
- The lost episodes: Lil' Clanton shuffle.
- Hot rats CD: extension of the Gumbo variations sax solo.

As I understand it Dweezil included an unused solo section from "Peaches en regalia" on one of his albums. Zappa continued to record with the musicians from "Hot rats" in March 1970. Among these recordings are:

- The lost episodes: Sharleena.
- Quaudiophiliac: Chunga's basement.

Twenty small cigars

"Twenty small cigars" from "Chunga's revenge" comes into this album directly from the 1969 "Hot rats" sessions. Other than "Sharleena" it wasn't re-recorded with the new band formed in the summer of 1970.

It opens with a piano introduction. Just as the "It must be a camel" example from above it contains enlarged chords (bars 1, 3, 5-7), alternating with normal 5th chords (bars 2 and 4). It's in E Dorian most of the time. The chord in bar 1, staff 1, is V 11th if you take the B as root. Again rhythmic complexities enter the picture, as the syncopic triplets movement in bars 5 and 6, gliding over a 3/4 basis. In bar 9 the main melody starts with one of the few instances of Zappa playing keyboard and guitar. It's a peaceful entirely instrumental song.

The image shows a handwritten musical score for the opening of "Twenty small cigars". The score is written in 3/4 time and has a key signature of one sharp (F#). It consists of four systems of staves.

- System I:** Marked "Piano gently". The top staff has a dynamic marking of "mp" and the bottom staff has "mf". Both parts feature triplet patterns. The word "Asbarz" is written above the top staff.
- System II:** Marked "Ensemble 4)". The top staff has a dynamic marking of "mf". The bottom staff has a dynamic marking of "vab.". Both parts continue with triplet patterns.
- System III:** Marked "Piano mp". The top staff has a dynamic marking of "mp". The bottom staff has a dynamic marking of "vab. 4". The music includes slurs and triplet patterns.
- System IV:** Marked "Solo 2)". The top staff has a dynamic marking of "p". The bottom staff has a dynamic marking of "vab.". The music includes slurs and triplet patterns.

Twenty small cigars, opening. Transcription: KS (update 2008, deposited at the I-depot, The Hague).
 1) The harpsichord plays parallel, an octave higher.
 2) The solo is played by the guitar, pitch notation as it sounds.

BURNT WEENY SANDWICH: ATONALITY AND THE USE OF SCALES

After five years of relentless touring Zappa in 1969 disbanded the Mothers of Invention in their first line up. The band members were taken by surprise and accusations on both sides followed. According to Zappa their technical abilities weren't adequate for performing (some of) his compositions and the band members accused Zappa of using their ideas without giving them credit. Some of them hold grudges until today. From the unreleased studio and live recordings two albums were compiled, "Burnt weeny sandwich" and "Weasels ripped my flesh", just as "Uncle Meat" and "Hot Rats" mainly instrumental albums. Both were released in 1970. For a completely live album from the sixties we have to wait until 1993, when "Ahead of their time" was released. To the right an outtake from the CD cover art, featuring a machinery collage by Cal Schenkel.

Though the concept of tonality is the main factor in harmonic analysis, its meaning is usually taken for granted. It depends much on the context of a text what the author means by it. Tonality is not such a clear concept as sometimes suggested, because it's a combination of features, that for this site I would describe as (in following order of importance):

- The music uses (mainly diatonic) scales.
- The scales are applied in a stable unfragmented way.
- The chords are 5th and 7th chords, occasional 9th chords, moving in a fluid way from chord to chord by having notes in common.
- The opening scale is also the ending scale.
- Harmonic cadences confirm the keynote.

You may as well use a different definition. But by describing tonality this way, it becomes better explainable that there's a large grey area between completely tonal and completely atonal. There's a big difference between Wagner's rapid shifting through keys and chromaticism, Debussy's extended chords (all combinations of scale notes, but avoiding the minor second) and his whole tone scale compositions and the calculated 100% atonality of Schoenberg. In for instance "Brown shoes don't make it" and the "Uncle Meat main title", Zappa's inclination to make fast and sometimes abrupt key changes has been commented upon.

Atonality is an integrate part of Zappa's music. He could use it at will in his rock compositions as well as in his chamber music and orchestral works, sometimes combining tonality and atonality in the same piece of music. He also applied atonality in jazz compositions and synclavier works. See the table below for an overview of pieces with atonal sections in this study, being almost eighty. The subject will come by in various other sections in this study like:

- Lumpy gravy: "I don't know if I can go through this again".
- Just another band from L.A.: "Penis dimension", "Billy the mountain".
- The LSO - The perfect stranger.
- Drowning witch - Them or us.
- Jazz from hell: "Damp ankles".
- The yellow shark.

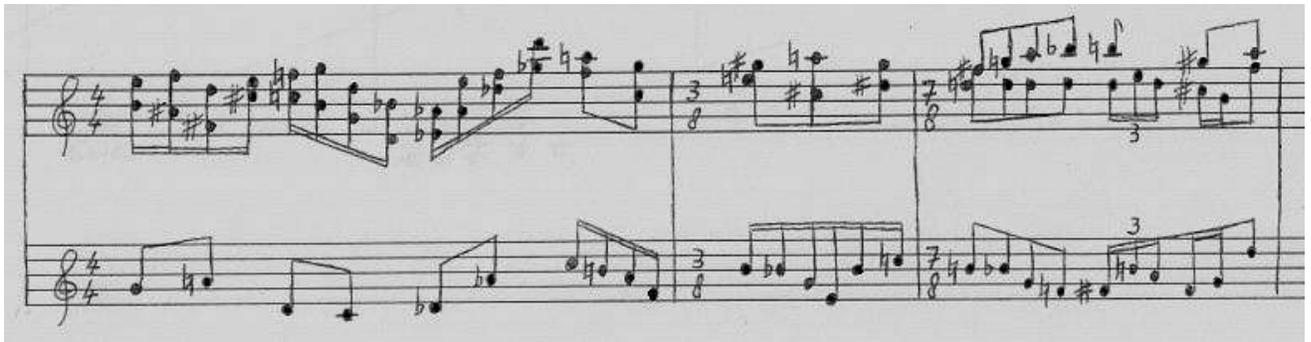
As it comes to "Burnt weeny sandwich", the two phases of "Igor's boogie" are clear examples of atonal music, while the piano introduction to "Little house I used to live in" is largely atonal. Examples of all three titles are included below. Also presented is "Kung Fu" from the "Lost episodes" as an example of atonal music dating from the sixties. The other tracks from "Burnt weeny sandwich" are diatonic and I'm ending this section with an overview of all the scales you can encounter in the examples from this study.

1. WPLJ

"Burnt weeny sandwich" begins and ends with a cover. The blues song "WPLJ", written by The Four Deuces, is the album opener. These songs have nothing in common with the main part of the album, where Zappa is continuing with the direction he took on "Uncle Meat".

2. Igor's boogie, phase one

The score of "Igor's boogie, phase one" is present in the Frank Zappa Songbook, vol. I, pages 36-37. It's largely atonal with varying meters. It's called a tight little march in the Songbook, though only 4 of its 13 bars are in 4/4. Most of the time the three parts its staves are made up of, are following the same rhythm, which aspect one might call tight. Bars can contain counterpoint movements, as in the example below with bars 2-4.

A musical score for three staves (treble, bass, and a second treble) showing bars 2-4. The first staff is in 4/4 time, the second in 3/4, and the third in 7/8. The music is highly rhythmic and atonal, featuring complex counterpoint movements and various chordal structures.

Bars 2-4 from Igor's boogie, phase I. Source: Songbook.

Other bars can be more homophonous with parallel movements. Bar 11 only contains a D, played via triplets and as a parallel octave. Bars 10-12 are the only ones that contain diatonic material. If you call the D the tonic, it would be D Dorian. Bar 12 begins with a series of 7th chords without the 3rd. The last combination upon the 2nd beat (G-A-B) might be called an incomplete 9th chord. The arpeggio opening chord of beat 3 is an enlarged chord, that might be called Dm11 (following the D Dorian scale). Next you've got Cmaj7 (no 5th), Em and Csus2. Not included below is bar 13 with the final chord, A-C#-E-B, a 9th chord (no 7th). It evades from D Dorian, though without sufficient notes to attribute it to another diatonic scale.

A musical score for three staves (treble, bass, and a second treble) showing bars 11-12. The music is in 3/4 time and features parallel movements with triplets and arpeggios. The notation is complex, with many notes and rests.

Igor's boogie, phase one, bars 11-12 (source: Songbook vol. I). The meter is 3/4.

established major scale in the melody."

- Page 131: "While our Mode III [KS: Mixolydian] is essentially the same mode as Russell's Mode II (both being located on the pitch two perfect fifths away from the Lydian tonic), the dominant-seventh sonority is prohibited in this theory. Stated plainly, dominant-seventh chords do not occur within the Lydian system—or, for that matter, Zappa's diatonic music, wherein the presence of the dominant-seventh chord should be taken as a sure indication of the employment of the "horizontal" major-scale tonal system (see, for example, the discussion of Example 4.9). Within the Lydian system, this lack can be partly attributed to the tendencies of resolution expected of the dominant-seventh. By avoiding this chord above the Mixolydian pedal, the controlling pedal's status as local tonic is maintained. For musical environments in which the Lydian mode functions similarly to a "key" (to be discussed later), this potential dominant-seventh chord would have resolution tendencies towards the fifth scale degree of the mode, thereby challenging the supremacy of the Lydian tonic."

The reason I'm reproducing this, is its relevance for the discussion that is taking place in Brett's Response to me. The analysis on page 123 is correct and the indicated chords can indeed faintly be heard in the background between 0:45-0:56. My own transcription is from the repetition played right after this, going slightly different. The prohibition of the dominant 7th (Mm7) is amply getting discussed in the mentioned Response and doesn't have to be repeated here. What I do like to point at is that in the above citation Brett seems to object to the presence of the Mm7 chord in his Lydian system in general, while in his Response he is stating that he only objects to its presence in Mixolydian. The Mm7 chord occurs fairly often in Zappa's music, so the adjustment is indeed understandable. But without adapting or withdrawing his initial statements, this is getting inconsistent. If he objects to its presence in Mixolydian only, then wouldn't the above example with Mm7 in Ionian suddenly become ok in his Lydian system?

4. Theme from Burnt weeny sandwich

The "Theme from Burnt weeny sandwich" is a pedal note/vamp solo in D Mixolydian with, when the piece is progressing, an abundance of percussion.

The image shows a musical score for a guitar solo. It consists of four staves. The top staff is labeled 'Guitar' and contains a melodic line with various ornaments and a '5' above it. The second staff is a blank staff. The third staff shows a bass line with a '6' below it. The fourth staff shows a bass line with a '7' above it. The score is in D Mixolydian mode and features a pedal note/vamp solo.

Theme from Burnt weeny sandwich, section. Transcription: KS (update Summer 2019, deposited at the I-depot, The Hague).

This title slowly fades in from a larger track this solo apparently was part of. The bass follows a pattern of four bars, that you might call a vamp, though the D pedal stands central:

- 1st bar: D pedal, on the fourth beat chromatically moving towards A via Db and C.
- 2nd bar: A pedal.
- 3rd bar: D pedal.
- 4th bar: E followed by C.

So a I-V-I-II-VII progression in D Mixolydian with keyboard(s) and a second guitar moving freely along the main D chord of the accompaniment. The example above begins with one bar with E followed by C, followed by two times the complete vamp. It has V and VII returning to I, pretty much going as a classical cadence.

About this progression Brett writes the following (page 106 of his 2009 study):

As was true for L/M, the chords of the D/M progression may switch places, with the Mixolydian chord occurring first. For the guitar-solo "Theme from Burnt Weeny Sandwich," (ECE 1967/1970b), for example, the vamp shifts between D-major and A-minor chords. Because the Mixolydian pedal appears first in the progression, and in a strong hypermetrical position, it is easier to hear this solo as being in D Mixolydian than in A Dorian.¹⁰⁵

¹⁰⁵ Bootleg outtakes reveal that "Theme from Burnt Weeny Sandwich" was originally recorded as the tail end to the song "Lonely Little Girl" from the album *We're Only in It for the Money* (1968). Significantly, "Lonely Little Girl" also uses the D/M progression in its "reversed" form.

Every author has a right to define his own terms. Brett calls the I-II alternation in Lydian a Lydian-Mixolydian (L/M) progression and the I-IV alternation in Dorian a Dorian-Mixolydian (D/M) progression. Both are recurring progressions in Zappa's output. Since Lydian II is identical to Mixolydian I, and similarly Dorian IV being identical to Mixolydian I, one might call it that way. In case of the "Theme from Burnt weeny sandwich" it's a I-V alternation in D Mixolydian, which you indeed can identify as the reversal of I-IV in A Dorian. I don't have the bootleg mentioned in the note, but it's true that "Lonely little girl" uses the reversed D/M progression for theme one of this song (see my *We're only in it for the money* section for a description). A disadvantage of Brett's terms is that it is causing some confusion:

- In his Response to me you can see that Brett doesn't include the Mixolydian M from the L/M and D/M instances in his list of songs using the Mixolydian scale. Apparently he doesn't see the M part of these two progressions as true examples of Mixolydian (neither do I).
- There are two more chords being used during "Theme from Burnt weeny sandwich", the II and VII chords from the D Mixolydian scale (it looks like Brett has been jumping to a conclusion by calling it just D/M in reversal). But how should these two be identified in Brett's terms? As V and III from A Dorian?
- There are more sorts of chord alternations happening in Zappa's music, and in pop music in general. Suppose other people would start calling them scale alternations too, wouldn't the identifying of chords and scales become a bit chaotic? Like calling a I-V alternation in major a major-Mixolydian alternation.

Personally I think it's easier to stick to the standard terms and conventions, then you don't get these problems.

5. Igor's boogie, phase two

The opening of "Igor's boogie, phase two" below is transcribed by me and only an approximation. It has an ongoing lead melody in the first staff, around which the other parts are playing in a so-called hocketing style. The other bars contain little pieces of melodic material, interrupted by pauses all the time.

Opening of Igor's boogie, phase II. Transcription: KS, by approximation. The meters here are my notational choice and not meant as compelling.
Update 2006, 3rd printed edition 2007.

It's difficult to hear what exactly is going on with irregular notes coming up from various angles. I also can't derive the meters with any certainty. Above I've followed the lead melody for setting up a division to make it better readable. Like "phase one", "phase two" is outspoken atonal and even more applying counterpoint lines.

6. Holiday in Berlin, full blown

"Holiday in Berlin, full blown" is the sequel of track 3. In it the themes from track 3 return, with their description, as well as a note example, being included in the Movie scores section of this study. Additional to the "full blown" version are an intro and a guitar solo. This guitar solo is the first one on record being played over the I-II chord progression in Lydian, D Lydian on this occasion, with two bars with the D chord alternating with two bars with the E chord. Probably because of its premiere, it gets exposed quite extensively by playing this progression in a couple of settings. During bars 1-8 the lower keyboard part

13 Guitar

17 8va -->

21 8va --> 5

Holiday in Berlin, full blown, section. Transcription: KS (update Fall 2019, deposited at the I-depot, The Hague), where elements could be taken over from the study by B. Clement (see below at the next Aybe Sea example).

This I-II alternation in Lydian became his favorite one as it comes to soloing over chord alternations. It returned during "Billy the mountain" (keyboard solo), "Son of Orange County", "Inca roads", "RDNZL" and "Pick me, I'm clean". Various individual solos are using this figure as well. See the Shut up 'n play yer guitar section for a table with all of them being listed. When you include ZFT releases, it gets challenged by the Black napkins chord alternation (see the FZ:OZ and Zoot allures sections of this study). Because this latter song has a written theme, its many performances always carry the title "Black napkins" (except

for "Pink napkins", when this theme got skipped). A number of individual solos, using the I-II alternation in Lydian, stem from live executions of "Inca roads", but they never relate to the thematic material from this song. They are independent instrumental interludes.

7. Aybe sea

"Aybe sea" is an instrumental for piano, guitar and keyboard. Zappa wrote little music for piano solo. "I was a teenage malt shop" and "The little house I used to live in" are the only examples on CD from his early career. In case of "Aybe sea", the guitar and keyboard are mostly doubling the piano part. It could also be played on piano alone. The later works "Ruth is sleeping" and "Piano" are synclavier music executed (partially) as piano pieces.

As said above "Holiday in Berlin, full blown" ends with a guitar solo with a I-II chord/pedal note alternation in D Lydian. As also noted by Brett Clement, these two chords are used as well for the opening of "Aybe sea", which makes the transition go very smoothly. The rhythm of "Aybe sea" is standard 4/4. Harmonically a number of keys are being touched upon. Regarding structure, it's half a variation piece with recurring themes and half through-composed.

The image shows a handwritten musical score for the piece "Aybe sea". The score is written in 4/4 time and consists of five staves. The key signature is D major (two sharps). The notation includes various rhythmic values, accidentals, and dynamic markings. There are several annotations in the score:

- A box containing the number "1" is placed above the first staff in the first measure.
- The instruction "Others as bar 1" is written in the second measure of the second staff.
- The instruction "Bars 1-2 repeat" is written in the fourth measure of the second staff.
- The instruction "Vab." is written at the bottom left of the first staff.

The score is divided into four measures. The first measure contains a melodic line in the first staff and a chord in the second staff. The second measure contains a melodic line in the first staff, a chord in the second staff, and a chord in the third staff. The third measure contains a melodic line in the first staff, a chord in the second staff, and a chord in the third staff. The fourth measure contains a melodic line in the first staff, a chord in the second staff, and a chord in the third staff.

II

Others as bars 3

Others as bars 4

Prob.

III

Prob.

Opening of Aybe sea. Transcription: KS (update 2017), with some material by B. Clement (see below).
Update spring 2017, deposited at the I-depot, The Hague.

0:00 Theme 1, bars 1-8. The chords used are E, mingled with Esus2, and D. It's difficult to hear the exact positioning of the notes from these chords. These bars can be interpreted as I-VII in E Mixolydian. As noted by Brett, the melody of bar 1 is a variation upon the opening line of the guitar solo from "Holiday in Berlin, full blown". The solo was probably played after "Aybe sea" had been written, so it looks like Zappa took this score to set off his solo.

0:11 Theme 2, bars 9-12. The occurring chords are now C and Eb. Combined with the melody, the keys can be attributed to C and Eb Lydian. The melody of bars 9-10 is a variation upon the one from theme 1. Bars 11-12 are a transposition of bars 9-10, going a minor third upwards.

0:16 Variation upon theme 1 with only the E chord beneath it (bars 13-20).

0:28 Variation upon theme 2 with the C-chord beneath it, add 2 in this case. The upper descant is playing parallel an octave plus a fourth higher. The transcription above ends with the first bar of this variation.

0:39 Theme 3 in A Mixolydian, mingled with altered notes and A Dorian. This mingling of closely related scales is common practice in Zappa's music. The melody follows A-C#-E-D-Bb-G-C natural-G-F#-D-A (0:39-0:41). The accompanying line is first playing just the tonic A, next E-F#-G-A, followed by C-B-A-G-A (0:39-0:45).

0:50 Theme 1.

1:01 Theme 2.

1:07 Through-composed finale. While the accompaniment is abundantly playing chromatic notes, the lead melody is to a degree diatonic. It starts in E, moving towards C# minor (1:30), next A Lydian (1:47) and back to C# minor (2:09), slowly fading out. It's the same set of notes, but with different pedal notes.

2:46 End.

(a) "Holiday in Berlin" (*Burnt Weeny Sandwich* 2:57 ff.)

The musical score for "Holiday in Berlin" is presented in two staves. The top staff, labeled "Solo", is in 3/4 time and features a melodic line with a triplet of eighth notes in the second measure. The bottom staff, labeled "Accomp.", is in 3/4 time and consists of a piano accompaniment with chords in the right hand and a bass line in the left hand. A bracket below the accompaniment staff indicates a "Lydian system: D" and an "L/M progression". The solo line ends with "(etc.)".

(b) "Aybe Sea," main theme

The musical score for "Aybe Sea" is presented in two staves. The top staff, labeled "Melody", is in 4/4 time and features a melodic line with a note marked "see opening motive of (a)". The bottom staff, labeled "Piano", is in 4/4 time and consists of a piano accompaniment with chords in the right hand and a bass line in the left hand. A bracket below the piano staff indicates a "Lydian system: D" and an "L/M progression (in reverse order)".

Opening bars of the guitar solo from *Holiday in Berlin*, full blown, and *Aybe sea*. Transcription: B. Clement.

See the left menu for the meaning of a "Lydian system" and the L/M progression.

8. The little house I used to live in (1970)

Piano introduction

The "Piano introduction to *Little House I used to live in*" seems to have been written for Ian Underwood to demonstrate what he is capable of. Specifically its opening is rhythmically complicated. The meters used are the odd numbered 5/8 meter, next to a more regular 3/4. More significantly the subdivisions of the meters keep changing, so that any idea of a rhythmical constancy gets avoided. Only bars 6-7 are using the same rhythm. Ian is playing it in a refined manner, making everything sound natural.

The album liner notes are ambiguous about whether Ian Underwood is its performer or also its composer. The "*The Frank Zappa Songbook vol. I*" takes away this doubt: composition and score are by Frank Zappa (see also the credit information on the end page). The score of the complete piano introduction is printed on pages 107-110, being referred to as "revised". Indeed some bars go different from the album, but the

majority is identical. A live version with a rock-band performance can be found on "Hammersmith Odeon" by the ZFT.

The piece knows a couple of patterns, that make a complex atonal composition like this one, quite coherent. Below I'm pointing at some elements. In total it can be divided into three blocks (following the Songbook):

- Opening block: bars 1-17, of which bars 1-13 are shown below.

- During bars 1-2 both the descant and bass staff are using parallel augmented 5th chords. With different ones sounding together, the total harmonies become broad chromatic chords. The movements of the two staves are opposite. The descant goes chromatically downwards. The bass follows a little sequence, going up with a second, next down with a minor third. It's upper notes move on as C-D-B-C#-A#-B#. By notating a B# instead of a C, you can see that Zappa wanted this pattern to be directly recognizable. This pattern returns as a larger sequence during bars 15-16 (not included above, but you can check the Songbook for this).

- Bars 3-4: the sextuplet contains a series of augmented 5ths without the 3rd. The other descant and bass chords keep being augmented 5ths.

- Bars 5-9: the meter becomes 3/4. While most of the piano introduction is outspoken atonal, during these bars some diatonic material can be heard. It's a good example of tonal vagueness. The melody by itself

is hardly tonal, but a relationship with keys is established by the chords that are played along this melody. When you're taking the root of the chords as "tonic", the keys would be C in bar 6, C# Dorian in bar 7-8, followed by sort of a mixture chord. This last arpeggio chord starts chromatically but then proceeds with notes of C.

- Bars 10-13: the meter returns to 5/8. These bars are the most irregular ones from this piece, rhythmically and harmonically. The bass staff is progressing melodically. Patterns can be discerned in the descant chords. The first three are made up of three notes, where the next one alters one note from the previous one. These are pretty dissonant chords. The next two are relatively consonant, a stacked fifth plus a B below it, followed by Bm-add4.

- *Middle block: bars 18-37.*

The middle block of the "Piano introduction..." continues basically atonally, with chord progressions that on the whole can be seen as a huge sequence. This entire section is characterized by several kinds of chord progressions that are interval determined (compare the melodic line of the first section of "Uncle meat"). For instance the next three bars:

The image shows three bars of handwritten musical notation for piano introduction. The top staff is in treble clef with a 3/4 time signature. The bottom staff is in bass clef with a 3/4 time signature. The first bar starts with a treble clef, a 3/4 time signature, and a key signature of one flat (Bb). The second bar has a key signature of two sharps (F# and C#). The third bar has a key signature of two sharps (F# and C#). The notation includes chords and melodic lines in both staves, with a 'p.' dynamic marking at the bottom.

Piano introduction to Little house I used to live in, bars 22-24. Source: Songbook, page 109.

Here the common element for the alternating eighth notes in each of these three bars is a fifth plus fifth chord alternating with a fourth plus fourth chord or with a third plus fourth chord. There are several more comparable bars in this piece with intervals alternating. Just as in "five-five-FIVE" and the first section of "Uncle meat", traditional harmony is ignored. See also the "It must be a camel" example (Hot Rats section) and the "Put a motor in yourself" sections (Synclavier section) for non-traditional chords. One might associate some passages from this middle block with diatonic scales, with bars 26-29 using notes from A minor, bars 30-31 following A Dorian and bars 32-33 using D Mixolydian.

- *Finale: bars 38-53.*

Bars 38-41 are specific for the revised version, whereas the CD version has more bars at the end of the middle block. It's always interesting to hear some sheet music, that hasn't been performed on any album. Bar 38, the first one from the next example below, is in 5/8 with one last figure with a chord alternation but in a pretty different manner. Again patterns can be discerned. Bars 40-41 are similar as it comes to both the rhythm and melodic directions, while the melody itself and the harmonies are completely different.



From bar 42 onwards this piece ends with a variation upon the opening from above. Compared with Ian's performance the three midi files (on-line version) are mechanical. Not included on the album is bar 53, where Zappa is making its human piano performance physical: he's prescribing you to move your buttocks, causing the stool to creak, followed by a cough on beat 3. He did things like this more often, probably for fun. From the premiere of "200 Motels, the suites" from 2000 I recall the brass section following a stage direction to twirl at one point. I don't remember when.

For further reading about this piece you can look into chapters 44-45 and 51 of a dissertation by Ulrik Volgsten, called "Music, mind and the serious Zappa: the passions of a virtual listener". In this study Zappa's serious music is described as tending either to pastiche works or to guitar derivatives, with some works in the middle. The word "pastiche" is here used in the sense of a simple "sounding like" quality, thus an aspect of the music rather than a hard categorization. The piano introduction then belongs to the pastiche works in the sense that it bears reminiscences of various modern music pieces as described in chapter 51.

Main themes

Three examples in this section represent the atonal works on "Burnt weeny sandwich". The remainder of this album contains music that uses diatonic scales. Next is the opening from the main theme from "The little house I used to live in", that on its turn can be subdivided again into six themes.

- 0:00 Piano introduction as described above.

- 1:43 The main theme starts off with theme 1 in D Mixolydian with the chord progression I-VII. The central theme last four bars and is played in two variants, that only differ from each other by one note: the first variant ends on C, the second on D. It's played four times in different setting. The whole - melody, bass and harmony chords - becomes a blending of I and VII. Bars 13-16 for instance are the VII 9th chord sustained for four bars.

- 2:14 Whereas bars 1-23 are in standard 4/4, bars 24-31 of the transcription are rhythmically complicated. The main meter is 11/8, over which a second theme in 12/8 starts to glide (Ludwig study, page 122). The chord here is I 9th in F# minor (F#sus2 in staff 1 plus mostly Amaj7 in staff 2). The bass makes a chromatic countermovement: F#-G natural.

1

6

11

12 Bars 5-8 Repeat
mp

Repeats
p mp

Drum solo begins

24
mf
Keeps repeating

mp Drum solo ends

As bar 25

mf

28
Keeps repeating

Little house I used to live in, main theme. Transcription: Wolfgang Ludwig (1992; acc. and part of the bass added by KS).

- 2:51 Theme 3 in A Mixolydian.
- 3:03 Theme 4 in E Mixolydian/Dorian. The harmony follows the Mixolydian major third, the melody the Dorian minor third.
- 3:28 Theme 3, much faster. See the Fillmore East section for a transcription of themes 3-4 by W. Ludwig.

- 3:32 Theme 2 now returns in E Mixolydian, over a bass pedal note E instead of F#.
- 3:53 Theme 3.
- 3:58 Theme 5 in A Mixolydian.
- 4:13 Theme 6 in E Mixolydian/Dorian, ending with a guitar improvisation. At 5:03 this little solo ends with the D chord. It lets the tonic switch to D for the soloing. On top of that the soloing modulates to D Dorian with a minor third.

This main theme also exists as an individual piece, called "The return of the hunch-back duke", with a live recording on "YCDTOSA Vol. V". Of interest is also the live version of the "Little house I used to live in (1971)" as released on the Fillmore East album, where this main theme has a newly composed intro. See the corresponding section for examples.

Solos

- 5:12 Violin solo by Don "Sugarcane" Harris in D Dorian.
- 9:10 Don Preston, who so far has been accompanying Sugarcane, is taking over with a piano solo.
- 10:38 Some more soloing by Sugarcane with the band playing vamps and chord progressions.
- 13:35 Composed section with variations upon material from the main theme.
- 14:54 Organ solo by Zappa himself. It has a basis in E Mixolydian. It fluctuates quite a bit, touching upon B and A Dorian, and D Lydian.
- 17:12 It now turns out that this last soloing was recorded live with Zappa addressing himself to the audience. Other parts stem from a studio recording at the time "Hot rats" got recorded, released as "Another waltz" on the 2019 ZFT issue "The Hot rats sessions". Zappa begins this jam with counting fast as "one-two-three, one-two-three", which explains the term waltz. For the larger part this turns into three ticks from beats of what sounds as a 12/8 meter.
- 18:41 End.

9. Valarie

A doo-wop cover of a song by Jackie & The starlites from the fifties. It's written by C. Lewis and B. Robinson and originally spelled as "Valerie". Another recording of this song can be found on the ZFT release "Greasy love songs", where it's better located in a context where it belongs.

Kung Fu

According to the notes in the "Lost episodes" booklet by Rip Rense "Kung Fu" stems from the late sixties. He describes it as a "stalwart little polymetric piece composed in the late '60s, with acrobatic percussion passages handled with aplomb by the redoubtable MOI percussionist of the early-and-mid-'70s, Ruth Underwood". Another larger atonal composition from this time was "Some ballet music", that regrettably is available only on the "The Ark" bootleg from the "Beat the boots" series.

In the case of "Kung Fu" the title can be taken literally. In martial arts the element of surprise is crucial. During the opening bars 1-5 of this piece each bar has its own characteristics, not referring to a previous bar. Within a bar there are various forms of relationships between the parts. In bar 1 there's a hammering on the F note, in bar 2 the bass movement from Db to C dominates etc. From bar 6 onwards the whole becomes more melodic for a longer period. "Kung Fu" was on the setlist for the Wazoo band, but not performed until late 1972, when the Roxy band got formed. It is this version that's present on "The lost episodes" and another one can be found on the "Piquantique" bootleg, with a live version from 1973. Peculiar is a keyboard part for "Kung Fu", that I found on the net. It's in Zappa's own handwriting. The strange thing about it is that it isn't actually included in the album versions. If you would play it separately, then you get the second example from above. This keyboard part is even more erratic than the

album version. Just by itself there are few structure building elements in it. Only in bars 7-10 a pattern can be recognized. In the transcription of the album version bars 3-4 in 5/8 of the keyboard part are combined to one 5/4 bar, because that's the way the drummer is beating on the "Lost episodes".

A handwritten musical score for Vibes and Cowbells. The score is written on six staves. The top staff is labeled "Vibes" and has a key signature of one flat (B-flat) and a time signature of 5/4. A circled "1" is written above the staff. The second staff is labeled "Cowbells". The score consists of two measures. The first measure contains rhythmic notation for Vibes and Cowbells. The second measure contains a complex rhythmic pattern for Vibes and Cowbells, including a triplet. The score is written in a clear, legible hand.

3

Handwritten musical score for system 3, measures 1-3. The score is written on six staves. The first staff (treble clef) shows a whole note chord. The second staff (treble clef) features a triplet of eighth notes. The third staff (treble clef) includes a triplet of eighth notes, a 'Dva' marking, and a '6' fingering. The fourth staff (treble clef) has a whole note chord. The fifth staff (treble clef) contains a triplet of eighth notes and a '6' fingering. The sixth staff (bass clef) shows a triplet of eighth notes and a '6' fingering. The system concludes with a double bar line and the word 'Etc.'

6

Handwritten musical score for system 6, measures 1-3. The score is written on six staves. The first staff (treble clef) is in 5/8 time and contains a triplet of eighth notes. The second staff (treble clef) is in 5/8 time and has a whole note chord. The third staff (treble clef) is in 5/8 time and features a triplet of eighth notes. The fourth staff (treble clef) is in 5/8 time and has a whole note chord. The fifth staff (bass clef) is in 5/8 time and contains a triplet of eighth notes. The sixth staff (bass clef) is in 5/8 time and features a triplet of eighth notes.

Kung fu, opening. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

The image shows a handwritten musical score on aged paper. At the top right, the word "Keyboard" is written in small letters. Below it, the title "KUNG FU" is written in large, bold, capital letters across two staves. The score consists of three systems of two staves each. The first system starts with a treble clef, a key signature of one sharp (F#), and a 3/4 time signature. The music is written in a complex, rhythmic style with many beamed notes and rests. The second system continues the piece, featuring similar rhythmic patterns and some dynamic markings like "f". The third system concludes the opening bars shown, with various musical notations including slurs and ties. The handwriting is clear and professional, typical of a composer's manuscript.

Keyboard part for Kung fu, opening bars (not included in The lost episodes). Source: original score.

TABLE WITH SCALES AND ATONAL WORKS

"The little house I used to live in" is one of the many examples that demonstrate that Zappa treats Dorian, Lydian and Mixolydian as equally important as major and minor. Maybe even more important given the fact that he seldom plays a solo in major or minor. The following is an overview of the number of times types of scales are used in all examples in this study:

- Major/Ionian	114
- Dorian	161
- Phrygian	15
- Lydian	74
- Mixolydian	153
- Minor/Aeolian	66
- Locrian	4
- Varying rapidly/floating	89
- Pentatonic	5
- Gypsy scale	2
- Indian scale	1
- Whole-tone scale	3
- Octatonic	2
- Self-created scales	3
- Atonal/chromatic	110

1	USE OF KEYS IN THE TRANSCRIBED BARS									
2	IN THIS STUDY									
3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
4	Lost in a whirlpool		E							
5	Pound for a brown/legend of the golden arches	B				B				
6	Sleeping in a jar					F				
7	Guitar waltz									X
8	Mice								Drums only	
9	The Blackouts								Spoken text	
10	The world's greatest sinner, single					A				
11	The world's greatest sinner movie sample #1	D			D					X
12	The world's greatest sinner movie sample #2							X		
13	The world's greatest sinner movie sample #3							X		
14	Holiday in Berlin	D			D					
15	Run home, slome theme #1								Pentatonic	
16	Run home, slome theme #2								Self-created scale	
17	Run home, slome cue #3					D				X
18	The little march							X		
19	Run home, slow movie sample #1		E							
20	Run home, slow movie sample #2							X		
21	Run home, slow movie sample #3									X
22	Run home, slow movie sample #4							X		
23	Take your clothes off while you dance		C							
24	Any way the wind blows	G								
25	Why don't you do me right (Pal records)						G			
26	Why don't you do me right (Joe's Xmessage)		F							
27	Why don't you do me right (1967)						G			
28	Walkin' out					D/A/E				
29	Waltz (Pal records)		D			D				
30	Speed-freak boogie		E							
31	Metal man has lost his wings		E			E				
32	Tiger roach		E							
33	Opus 5									X

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
34	Breaktime		C							
35	Memories of El Monte	G								
36	Love of my life	E								
37	Grunion run		C							
38	Jessie Lee					G				
39	I was a teenage matshop	C	D							
40	I'm loosing status at the high school					Eb	F			
41	Status back baby	C								
42	Arabesque/Toad of the short forest	A	C/D/E			X		X		
43	Duodenum		E	E						
44	Bossa Nova			G						
45	Mondo Hollywood		E							
46	Motherly love		A			A				
47	Hungry freaks, daddy					A/E	E		Pentatonic	
48	I ain't got no heart		G							
49	Who are the brain police	X								
50	I'm not satisfied	D	A			E				
51	You're probably wondering why I'm here	G				E				
52	Trouble every day		E							
53	Help I'm a rock			A						
54	It can't happen here									X
55	The return of the son of the monster magnet							X		
56	The downtown talent scout		A							
57	Plastic people					G/D				
58	The duke of prunes			E	F		E			
59	Amnesia vivace								Major type	X
60	Brown shoes don't make it (1967-81)		A/C#/F#		D	Ab	A	X		X
61	Invocation & ritual dance of the young pumpkin		C#/E							
62	America drinks							X		
63	America drinks and goes home							X		

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
64	Who needs the peace corps?	D	F#		C	C	F#			
65	Mother people	D	A/E							
66	Absolutely free	Ab	E			F				
67	What's the ugliest part of your body?	G								
68	Bow tie daddy	C						X		
69	Concentration moon	Bb	C					X		
70	Flower punk	X			X	B				
71	The chrome plated megaphone of destiny									X
72	No matter what you do					Bb				
73	Oh no		E							
74	I don't know if I can go through this again							X		X
75	Almost Chinese		C#							
76	It's from Kansas				F			X		
77	King Kong (Lumpy gravy)					A				
78	Foamy soak							X		
79	Unit 3a							X		
80	Unit 9/ A vicious circle									X
81	Kangaroos									X
82	How did that get in here?									X
83	Cheap thrills					A				
84	How could I be such a fool	C/Bb	E					X		
85	Jelly roll gum drop					A				
86	You didn't try to call me (1966-76)	G				A/C#E				
87	"No, no, no"					Bb				
88	Stuff up the cracks	C								
89	Oh, in the sky	G								
90	If I could only be your love again	G								
91	Uncle meat (1969)	D/Eb						X		
92	Uncle meat variations					C		X		
93	Zolar Czaki									X

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
94	Dog breath				G	A				X
95	Dog breath variations (1969/93)		E							
96	Dog breath variations (1974)								Floating	
97	Exercise #4 (1973)					A/C				
98	Prelude to King Kong		F#							
99	The legend of the golden arches		G#						Irregular	
100	Ian Underwood whips it out		Eb							
101	The air	E			A					
102	Project X	Bb						X		
103	Cruising for burgers		B			D/F				
104	King Kong	Db	Eb			Ab			Pentatonic	X
105	Epilogue	Ab						X		
106	The rejected Mexican pope									X
107	Uncle rebus	Eb	Eb/C		Db		C			
108	Agency man	C								
109	It must be a camel							X		
110	Peaches en regalia		B							
111	Willie the pimp (1970)		A							
112	The Gumbo variations		G			G	D			
113	Little umbrellas		D			E/F#/G	A			
114	Twenty small cigars		E							
115	Igor's boogie 1									X
116	Igor's boogie 2									X
117	Theme from Burnt weeny sandwich					D				
118	Aybe sea				C/Eb	E				
119	Little house piano intro									X
120	Little house main theme					D	F#			
121	Kung fu									X
122	What will this evening bring me this morning	E								
123	Sofa interlude (1971-75)					G				

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
124	Didja get any onya			F#	C					
125	Gas mask									X
126	Get a little		E			E				
127	Eric Dolphy's memorial barbecue									X
128	Dwarf Nebula	A								
129	My guitar wants to kill your mama		G			G	B			X
130	The Orange County lumber truck		X			A				
131	Weasels ripped my flesh								Cluster	
132	Baked-bean boogie		Eb							
133	No waiting for the peanuts to dissolve								Pentatonic	
134	Chocolate Halvah		E							
135	Underground freak-out music								Pentatonic	
136	The Nancy and Mary music		Eb							
137	Tell me you love me		F#							
138	Sharleena					G	G			
139	Chunga's revenge		D							
140	Rudy wants to buy yez a drink	C			F	G				
141	Transylvania boogie (Chunga's revenge)		E			A			Gypsy scale	
142	(and Transylvania boogie (Ahead of ...))									
143	Twinkle tits		E			E				
144	Chunga's basement		D							
145	Dance of the just plain folks							X		
146	Holiday in Berlin solo				D					
147	Call any vegetable solo		E							
148	Brain police (1970)		C							
149	Brain police (1971)		C							
150	The subcutaneous peril		D							
151	You never know who your friends are							X		
152	Little house intro (1971)		A				A			
153	Latex solar beef		B							

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
154	(Willie the pimp (1971))									
155	Bwana dick		E		C		F#	X		
156	Do you like my new car?	F#				F#				
157	The groupie routine	F#	F#			F#				
158	Tears began to fall		D/B							
159	Scumbag		D							
160	Brixton still life					D				
161	Once upon a time	C								
162	Sofa (1971)	C				G				
163	Divan									X
164	Call any vegetable (1971)		F#/A			A	E			
165	She painted up her face		B			E				
166	Penis dimension									X
167	Billy the mountain	D				G/D				X
168	Number 7									X
169	Piccolo part									X
170	Nun suit									X
171	The girls's dream									X
172	Little green scratchy sweaters									X
173	Mistery roach		E			E				
174	Tuna sandwich bolero					X				
175	Lonesome cowboy Burt					C				
176	Dental hygiene dilemma									X
177	Magdalena					D/A				
178	Overture	C			C					
179	Would you like a snack?	C			Eb/Ab/D		C#			
180	What's the name of your group?							X		
181	Can I help you with this dummy							X		X
182	Touring can drive you crazy									X
183	Centerville									X

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
184	Janet's big dance number									X
185	Half a dozen provocative squats	G			F					
186	Lucy's seduction of a bored violinist								Self-created scale	
187	I'm stealing the room									X
188	Does this kind of life look interesting to you?									X
189	The pleated gazelle									X
190	Dew on the newts we got								Floating	
191	Magic fingers		A							
192	Big Swifty		E	F#/E		E				
193	It just might be a one shot deal	G				E				X
194	For Calvin							X		
195	Your mouth		C							
196	Cletus awreetus-awrightus	A/Db/E	G/B							
197	Eat that question		E							
198	The grand wazoo		D				A	X		
199	Another whole melodic section							X		
200	Think it over		D				D			
201	Waka/Jawaka	F/D/E			A/F	A/G			Locrian	
202	Blessed relief	F/E	A/G/F#		Bb					
203	Greggery Peccary mvt. I interlude	D								
204	Greggery Peccary mvt. III solo						E			
205	Variant I processional march									X
206	Imaginary diseases		B			A				
207	Rollo		E		Bb	Ab		X	Octatonic	X
208	Been to Kansas in A minor		A							
209	D.C. Boogie					D				
210	Farther O'blivion	E	F/F#			E/C				
211	Little dots									X
212	Camarillo brillo	E								
213	I'm the slime		F#/E/D							

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
214	Dirty love					D				
215	Fifty-fifty	Db	D/Eb/C	C	Db/E	C/Db/Ab/Cb				
216	Dinah-Moe Humm	E								
217	Montana					A/B			Floating	
218	Don't eat that yellow snow					D				
219	Don't eat that yellow snow, Australia				D	D				X
220	Nanook rubs it			D#						
221	St. Alfonso/Father O'blivion					E		X		
222	Excentrifugal forz					A				
223	Apostrophe	C	E/B			D	B			
224	Uncle Remus							X		
225	Echidna's arf	E	B		E	A	B/C#		Whole-tone scale	
226	Don't you ever wash that thing	C								X
227	Cheepnis		E			D				
228	Orange County				E					
229	Dickie's such an asshole		B/F#				F#			
230	Pojama prelude		D			C/D/G				
231	All skate	A	A			C/A				
232	Village of the sun (1973-74)	D	F/G		F	G		X		
233	Inca roads (1973)	C								
234	Sheik Yerbouti tango						F		Whole-tone scale	
235	Be-bop tango							X		
236	Approximate									X
237	Pygmy twylyte				Bb		B			
238	The idiot bastard son							X		
239	Room service		B			E	E			
240	Dummy up						B			
241	Dupree's paradise (1973)	B	B/A		E			X		X
242	Florentine Pogen						E			
243	Inca roads (1975)	C			C			X		

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
244	Can't afford no shoes		E		X	B/E				
245	Po-jama people		D			D				
246	Evelyn							X		
247	San Ber'dino		A			E	F#			
248	Andy		C#		A/D					
249	Debra Kadabra		A/D/E							
250	Carolina hard-core ecstasy (1975-84)	C	A		C					
251	200 years old		G							
252	Cucamonga		Eb		G	A				
253	Muffin man		F#					X		
254	Original duke of prunes								(see The duke ...)	
255	The duke of prunes regains his chops		E							
256	Duke of prunes (1975)	E		G#			G#/F			
257	This town is a sealed tuna sandwich (prologue)									X
258	Bogus pomp, tuna sandwich theme	E								
259	Bogus pomp, piano variation									X
260	Bogus pomp, part of the coda	D								
261	Music for a low budget orchestra			D		Bb/C	B/C#			X
262	Greggery Peccary							X		X
263	The new brown clouds (1972-5)	G	A		F					
264	Lemme take you to the beach	X				E/A				
265	RDNZL	C/D/A	A		A/C			X		
266	Phyniox	Ab		C	Ab	Ab				
267	Reeny ra					G			Locrian	
268	Any downers?						F#			
269	Kaiser rolls					D				
270	Keep it greasy (1976)		D							
271	Keep it greasy (1979)		G							
272	Black napkins				D		C#			
273	Chunga's revenge, rhythm guitar solo		D					X		

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
274	City of tiny lights		G							
275	Wind up working in a gas station	C/B	D			D				
276	The torture never stops		G							
277	Friendly little finger							X		
278	Zoot allures	E						X		
279	Disco boy					B				
280	Filthy habits			F/C			F/C			
281	Regyptian strut		B/G#					X		
282	Flambay							X		
283	Time is money	Bb	C	A	Gb/Bb	Bb	A/E/C		Locrian, whole-tone	X
284	Sleep dirt							X		
285	The ocean is the ultimate solution					C				
286	The black page #1				X					
287	Manx needs women									X
288	Titties and beer		F#			B				
289	I promise not to come in your mouth						C			
290	Big leg Emma	E	E		E					
291	The purple lagoon/Approximate									X
292	The be-bop tango (1976, Purple lagoon)									X
293	Duck duck goose					E				
294	Down in the dew							X		
295	A little green rosetta	A								
296	Ship ahoy		D			D				
297	Jones crusher					E				
298	Punky's whips							X		
299	Conehead instrumental					Bb				
300	Conehead (1978)		F/E							
301	Basement music #2					D				
302	Bowling on Charen					B				
303	The black page #2				G					

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
304	I have been in you					A				
305	Flakes	D/E				E				
306	I'm so cute		E				E			
307	Baby snakes	E			C					
308	Dancin' fool		C#			A/Bb				
309	Wild love	B			A					
310	Mo' mama					E				
311	Yo' mama				C	E	A			
312	Dong work for Yuda	D								
313	Watermelon in Easter hay (H.O.)	E								
314	King Kong (H.O.)		Eb		D					
315	Heidelberg					E				
316	Paroxysmal splendor	C	A			A				
317	Ancient armaments		A							
318	Stinkfoot (1974-8)		C			C				
319	Occam's razor				C					
320	On the bus		A							
321	Central scrutinizer		D			D				
322	Joe's garage	E								
323	Catholic girls				A	F#				
324	Fembot in a wet T-shirt	E								
325	Why does it hurt when I pee?					D	A			
326	Lucille						A			
327	Sy Borg						E			
328	Outside now				Bb					
329	Packard goose						C#			
330	Watermelon in Easter hay	E								
331	Tush-tush-tush						F#			
332	A token of my extreme					D	F#/A			
333	No more Mr. nice girl	E			A					

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
334	Fine girl				C					
335	Panty rap				D		C#			
336	Easy meat		F#		E	F#				
337	Dance contest		E							
338	The blue light					A				
339	Pick me, I'm clean				C	D				
340	Peaches III						B		Locrian	X
341	Five-five-FIVE							X		
342	Shut up 'n play yer guitar				C					
343	While you were out		D							
344	Treacherous Cretins	A					D			
345	Soup 'n old clothes		D							
346	Gee, I like your pants				C					
347	Canarsie									X
348	The deathless horsie (YCDTOSA)					B	C#			
349	(and The deathless horsie (SUNPYG))									
350	Pink napkins		C#		D					
351	Return of the son of Shut up 'n play yer guitar				C					
352	Why Johnny can't read					E				
353	Canard du jour						G			
354	Harder than your husband	C								
355	Doreen	E/F								
356	Tengo na minchia tanta						G			
357	You are what you is					Bb				
358	Society pages					Bb				
359	Beauty knows no pain		G							
360	Stevie's spanking					A				
361	Heavenly bank account	G			G					
362	Jumbo go away		Bb/G			Eb				X
363	The meek shall inherit nothing	Gb	Db			Gb				

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
364	If only she woulda		B							
365	Mo 'n herb's vacation									X
366	Bogus pomp									X
367	Sad jane							X		
368	Bob in Dacron									X
369	Pedro's dowry									X
370	Envelopes (1983)									X
371	Outside now, again								Floating	
372	The girl in the magnesium dress									X
373	Dupree's paradise (1984)				E					X
374	The perfect stranger									X
375	Valley girl	C/F		E						
376	I come from nowhere					F#	B			
377	Drowning witch		E/F#/B				A/F#			X
378	Envelopes (1982)									X
379	Teen-age prostitute							X		
380	Ya Hozna	Bb				C				
381	Sinister footwear II						B	X		X
382	Theme from Sinister footwear III				F					
383	Marque-Son's chicken							X	Octatonic	
384	Them or us				Bb					
385	Frogs with dirty little lips	A					A			
386	Sinister footwear I									X
387	Naval aviation in art?/Jeff and Don									X
388	Cocaine decisions	C			D				Gypsy scale	
389	Stick together					A				
390	The jazz discharge party hats									X
391	The radio is broken							X		
392	Tink walks amok					E				
393	Moggio						E	X		

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
394	We're not alone	C/E					F#			
395	The torture never stops (1980)	A	A							X
396	Prologue					A				
397	The mammy nuns					F#				
398	Wistful wit a fistful							X		
399	The 'torchum' never stops		G							
400	Harry and Rhonda					Ab				
401	Harry-as-a-boy								Floating	
402	Miss Pinky		A			A				
403	The crab-grass baby					C				
404	Brown Moses	F#/Db								
405	No not now/Won ton on								Floating	
406	Baby take your teeth out				D					
407	Let's move to Cleveland	C	E							
408	Hot plate heaven at the Green hotel		E							
409	For Giuseppe Franco							X		
410	He's so gay	Bb				Bb				
411	Bobby Brown	C								
412	One man - one vote					B				
413	Aerobics in bondage							X		
414	I don't even care					E				
415	What's new in Baltimore	E	E					X		
416	Alien orifice		G/C		Eb/C	A	E/G		Bb minor variant	
417	Porn wars						F#			X
418	H.R. 2911									X
419	Night school	C#			C/Ab					
420	The Beltway bandits							X		X
421	While you were art II		D						Floating	
422	G-spot tornado		B					X		
423	Damp ankles									X

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others
424	Massagio Galore						B		
425	The black page (1987)								Chromatic
426	Sexual harassment in the workplace						C#		
427	Republicans							X	
428	In-a-gadda-Stravinsky	D	D		D	D			
429	Do not pass go		B						
430	Once again, without the net				D	D			
431	That's not really reggae		A						
432	Jim and Tammy's upper room		G						
433	Were we ever really save in San Antonio?		B						
434	That's not really a shuffle		Eb						Chromatic
435	Hotel Atlanta incidentals		Eb						
436	Sunrise redeemer					E			
437	Orrin hatch on skis		D			D			
438	For Duane		A						
439	GOA					D			
440	Swans? What swans?				Bb				
441	Too ugly for show business					D			
442	System of edges				C				
443	Things that look like meat		G						
444	Canadian customs							X	
445	Babette	C							
446	Ride my face to Chicago					D	B		
447	The black page (1984)				G				
448	Shall we take ourselves seriously							X	
449	Thirteen				C				
450	Honey, don't you want a man like me? (1976)		A						
451	Honey, don't you want a man like me? (1980)						E		
452	Honey, don't you want a man like me? (1984-88)				C				
453	King Kong (1971/82)	Bb	Eb			A			

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
454	Rhymin' man	A								
455	Promiscuous					D				
456	Welcome to the U.S.	Eb								X
457	Any kind of pain	F/G			F	C/Bb				
458	What kind of girl?		A			A				
459	Jesus thinks you're a jerk	C					A			
460	Heavy duty Judy (1988)					E		X		
461	The black page (new age version)	F			G/Bb					
462	When yuppies go to hell							X		X
463	The torture never stops, part II		A							
464	Zomby woof		A						Floating	
465	King Kong (1988)		D							X
466	Let's make the water turn black (1968-88)	C						X		
467	Good lobna		F#							
468	Butter or cannons									X
469	Ask dr. Stupid		F#			F#				X
470	Trance-fusion		D							
471	Diplodocus		Eb							
472	Soul polka		C#							
473	Light is all that matters									X
474	Bavarian sunset	E								
475	Outrage at Valdez						F			
476	The Valdez score								Self-created scale	
477	Electronic music by FZ									X
478	Improvisation in A					A				
479	Budapest solo					D				
480	Strat Vindaloo								Indian scale	
481	Strictly genteel	D			D			X		
482	9/8 Objects			C						
483	What will Rumi do?					E				

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
484	T'Mershi Duween (1991)		D			E	B			
485	This is a test							X		
486	Uncle meat (1992)	Eb			G					
487	Exercise #4 (1992)					G		X		X
488	Ruth is sleeping									X
489	III Revised									X
490	Times beach II									X
491	Times beach III									X
492	Times beach IV									X
493	Pentagon afternoon									X
494	None of the above									X
495	Food gathering in post-industrial America									X
496	Get Whitey							X		X
497	Put a motor in yourself		E					X		
498	Reagan at Bitburg							X		
499	Xmas values									X
500	Buffalo voice									X
501	N-lite					A		X		
502	I was in a drum		F							
503	A pig with wings									X
504	Hot & putrid									X
505	The unanswered cluster									X
506	Gross man									X
507	Why not							X		
508	Beat the reaper									X
509	Samba funk									X
510	Overture to Uncle Sam							X		X
511	Amnerika (vocal version)	F								
512	Dance me this	F				F				
513	Pachuco gavotte									X

3	Title	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Varying rapidly	Others	Atonal
514	Wolf Harbor									X
515	Rykoniki									X
516	Piano							X		X
517	Calculus								Floating	

It doesn't lead to big conclusions from my perspective. There's a tendency to prefer Dorian over minor, both for Zappa's music in general and for the guitar solos. These are the two regular modal scales with a minor third. The uncommon Phrygian scale gets used every now and then, but not frequently. As it comes to the major type of scales the following order is Mixolydian - major - Lydian. For the solos Mixolydian and Lydian approach each other, while major moves to the background. The table contains the keys per song in the following order as they appear in in this study. It only deals with the keys in the transcribed bars. In a few instances Zappa is indecisive about a note being natural/sharp/flat or about the pedal note, so for a couple of cases one might choose for a different scale. It wouldn't affect the general idea. In many cases the scales are changing thus rapidly, that I didn't assign the corresponding bars to individual keys. It can be opened as a normal html webpage or as an Excel sheet.

Key changes and a preference for Lydian?

The keynote in Zappa's music is often determined by bass pedal notes, to a lesser extent via harmonic cadences. In the study by Brett Clement, already mentioned above, the first is called the vertical approach and the second the horizontal. The difference comes out the clearest by comparing the first theme from "Uncle Meat" with for instance "You're probably wondering why I'm here". During the first theme you've got a melody being played over just one pedal note - chord combination. The melody from the latter is accompanied by a chord progression with the bass being part of these chords. This difference is directly related to when you're talking about a modulation: does a change of the pedal note/accompanying chord

cause a modulation or is it a different step within the same scale. It's not possible to exactly draw a line and it also depends upon the context. In this study I'm roughly doing the following:

- When a change of the pedal note goes along with altering notes for at least a bar, I'm calling it a modulation rather than an incidental change.
- When notes get altered systematically for over two bars, with the pedal note remaining the same, I'm also calling it a modulation.
- When the pedal note changes with no notes being altered, I'm inclined to call it a different step within the same scale up to, say, three bars. But when this gets maintained for a longer period, I'm calling it a modulation as well.

G. Russell wrote a Lydian chromatic concept in the fifties, using only the vertical approach (it was written for jazz players, who improvise over pedal notes and chords). Brett has associated Zappa with this theory. In his Response to me (see the left menu), Brett is arguing about the value of Russell's vertical approach, but that approach as such is not really the relevant part. I also look at much of Zappa's music in a vertical way and so do Steve Vai and Zappa himself. One doesn't need a Russell theory for doing so, but it does get relevant when it has consequences. This is the case for Russell and Clement. Russell has an outspoken preference for Lydian for playing major harmonies and Dorian for minor harmonies. Brett has repeatedly stated that Lydian is Zappa's most frequently used scale in his diatonic instrumental music, the field of Brett's own Lydian theory. It's also his main reason for linking Zappa to Russell. This is done in his study from 2009, his article in Music Theory Spectrum and his Response to me. In his Response this gets specified with a list of all instrumental songs. Everything can be found via the links to pdf files in the left menu of this site, so there's no need to repeat this here. Many examples from the mentioned titles are also present in my main study. In case there are differences, I've refrained from discussing them. Brett has also repeatedly stated that examples in Ionian and Aeolian are rare in Zappa's instrumental music. In his article you can find him talking about a general avoidance of major and minor, thus going beyond instrumental music. This is happening in his reference to Mark Spicer, the editor from Music Theory Spectrum, who approved his article. This was evidently done to please Spicer, because this reference hardly bears any significance upon the discussed material. Another thing Brett came up with, is a set of preferred and prohibited chords, briefly mentioned in the Zoot allures section. This is the more interesting part where the Lydian theory by Brett actually gets consequences. Otherwise one might think it's just two people bickering about Zappa's preferred scale.

Brett's 2009 theory directs itself to diatonic instrumental music. In his article Brett newly introduces the term modal style. Vaguely defined at first as most instrumental music and some songs, this term does get clarified as situations where Zappa is applying his Lydian theory halfway this article. So it in effect says that his theory applies to what it's applicable to, which is always the case, thus offering no new perspectives. Brett does have a right to say that he finds that some songs (with lyrics) follow his theory, but he can't use them as evidence in favour of his theory. When you would like to extend your theory to a wider area, songs with lyrics in this case, then this whole field becomes admissible. Only picking out the songs that suit your theory is as a method not allowed. Vice versa you can't start dismissing instrumental examples that don't suit you when you write a theory about instrumental music. Then any instrumental example is admissible. Their nature is irrelevant.

THE PENTATONIC SCALE

Brett lists a lot more pentatonic examples than me. For determining scales, I think one should better follow one general method, which is listening to all parts. When melodic sections are pentatonic, but the bass part, chords and other melodic sections complete it to a full diatonic scale (mostly Dorian in case of Brett's examples), I call these examples Dorian or Mixolydian. I agree that there are many pentatonic passages in Zappa's music, but he seldom wrote pentatonic music for all parts over a longer period. It's not wrong to say that examples from Zappa's music can be pentatonic, but this doesn't mean that the pieces they stem from aren't Dorian or Mixolydian anymore.

Below I'm presenting some examples, that Brett calls minor pentatonic and minor pentatonic only. In his

argument with me he's trying to convince you that you should see them as a category by themselves, separate from Dorian. He's suggesting that one has to choose for minor pentatonic OR Dorian, while it's much more realistic to say BOTH are happening. The most neutral way to put it is calling these instances Dorian with pentatonic passages, a subcategory of Dorian. Or pentatonic examples in a Dorian environment if you like. In the examples I've encircled notes in red, that extend the minor pentatonic scale to Dorian, and in green the chromatic notes.

The image shows a handwritten musical score for guitar and bass. The guitar part is written on a treble clef staff with a key signature of one flat and a time signature of 8/8. It features a melodic line with several notes circled in red, indicating extensions of the minor pentatonic scale. The bass part is written on a bass clef staff with a key signature of one flat and a time signature of 8/8. It features a rhythmic accompaniment with several notes circled in green, indicating chromatic notes. The score is divided into three measures. The first measure is marked with a dynamic of *mf*. The second measure is marked with a dynamic of *p*. The third measure is marked with a dynamic of *p*. The word "Guitar" is written above the first staff. The word "Prob." is written below the first staff. The word "mf" is written below the second staff. The word "p" is written below the third staff.

Soup 'n old clothes, opening bars. See the Shut up 'n play yer guitar section or the FZ Guitar book for more.

Handwritten musical score for "The torture never stops (Zoot allures), coda." The score is written on six staves. The top staff is for the Viola (Vn), the second and third staves are for Keyboards, the fourth staff is for Guitar (Guitar), and the bottom two staves are for Double Bass (Vab.). The key signature is B-flat major (one flat) and the time signature is 4/4. The score includes dynamic markings such as *mf* (mezzo-forte) and *pp* (pianissimo). Several notes are circled in red: a quarter note in the Viola staff, a quarter note in the second Keyboard staff, a quarter note in the Guitar staff, a quarter note in the Double Bass staff, and a quarter note in the bottom Double Bass staff. The score concludes with a coda symbol.

The torture never stops (Zoot allures), coda.

Handwritten musical score for "The torture never stops part two (1988), opening." The score is written in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. It consists of several systems of staves:

- System 1:** Features a treble staff with a box around measure 7 and a triplet of eighth notes. Below it, a bass staff is labeled "Plus vague harmonic fill in" and another bass staff is labeled "Bvabassa". A handwritten note "As bar 1" is present.
- System 2:** Labeled "Guitar" and "Bvabassa". The treble staff contains a melodic line with triplets and a "diva" marking. The bass staff has a simple accompaniment. The word "Etc." is written at the end of the system.
- System 3:** Labeled "Bvabassa" and "Loco". It features a fast, rhythmic melodic line with a tempo marking of 23:16. It includes a box around measure 12, a "6" marking, and a triplet.
- System 4:** Labeled "15" and "Bvabassa". It continues the melodic line with a "diva" marking and a triplet.
- System 5:** Labeled "19" and "Bvabassa". It shows a triplet of eighth notes.

Red boxes highlight specific notes or groups of notes across the score, and a green box highlights a triplet in the first system. The notation includes various musical symbols such as slurs, accents, and dynamic markings.

The torture never stops part two (1988), opening.

1 Guitar Fast

8va b.

Call any vegetable (1971 solo), opening bars.

9

8va b.

Call any vegetable (1971 solo), section.

1

8va

Repeats

Bars from Speed-freak boogie. See the Pal records and Original sound section for more.

Handwritten musical score for Lead Guitar and Bass. The score is divided into two systems.

System 1:

- Lead Guitar:** Treble clef, 4/4 time. Starts with a first ending bracket labeled "1". The melody features notes marked with green boxes. Dynamics include *mf* and *pulsing*.
- Bass:** Bass clef, 4/4 time. Features a triplet marked with a red box and *mp*. Other notes are marked with blue and red boxes. Dynamics include *P*, *pp*, *P*, *pp*, and *mp*.
- Drums:** Bass clef, 4/4 time. Includes a *mp* dynamic marking.
- Brab. (Bass):** Bass clef, 4/4 time. Includes notes marked with green and purple boxes.

System 2:

- Lead Guitar:** Treble clef, 4/4 time. Starts with a first ending bracket labeled "1". Dynamics include *mf*.
- Bass:** Bass clef, 4/4 time. Features notes marked with blue and red boxes.
- Drums:** Bass clef, 4/4 time.
- Brab. (Bass):** Bass clef, 4/4 time. Includes notes marked with purple boxes.

Wind up working in a gas station, interlude.

1

Sva

Repeats

As staff 2

Keeps repeating

4

Sva

Keep repeating

As staff 2

Keeps repeating

7

Sva

(Others keep repeating)

Regyptian strut, 1:42 till 2:10.

- a) Soup 'n old clothes.

D minor pentatonic = D-F-G-A-C.

D Dorian = D-E-F-G-A-B-C.

- b) The torture never stops.

G minor pentatonic = G-Bb-C-D-F.

G Dorian = G-A-Bb-C-D-E-F.

Brett's theory is about instrumental music. A case could be made for calling the opening and coda from the "Zoot allures" version hexatonic, when you look at them separately. I haven't transcribed the solo in it, but I did transcribe parts of the solo from the 1980 en 1988 editions, when the song is played in A Dorian. Then you do encounter all notes from the Dorian scale.

A minor pentatonic = A-C-D-E-G.

A Dorian = A-B-C-D-E-F#-G.

- c) Call any vegetable solo.

A Mixolydian = A-B-C#-D-E-F#-G.

A minor pentatonic = A-C-D-E-G.

A Dorian = A-B-C-D-E-F#-G.

Brett calls the song E Dorian and the solo A minor pentatonic. This goes for the "Just another band from L.A." version. During the first eight bars of this solo it's Mixolydian rather than Dorian, with the A7 chord standing central. During the standard soloing, following upon this, the lead melody is pretty much using minor pentatonic only. The accompaniment, however, completes the Dorian scale.

- d) Speed-freak boogie.

E minor pentatonic = E-G-A-B-D.

E Dorian = E-F#-G-A-B-C#-D.

- e) Wind up working in a gas station, interlude.

D minor pentatonic = D-F-G-A-C.

D Dorian = D-E-F-G-A-B-C.

D Mixolydian = D-E-F#-G-A-B-C.

Here the notes that would extend the minor pentatonic scale to Dorian are relatively few. More disturbing for calling it minor pentatonic, is the presence of the F natural (encircled in purple) and F# (encircled in blue) in equal amounts next to each other. Some scales differ by only one note, like D Dorian and D Mixolydian by the F natural and F#. So that's why I call this a mingling of Dorian and Mixolydian, a common practice in Zappa's music.

- f) Regyptian strut, 1:42 till 2:10.

B minor pentatonic = B-D-E-F#-A.

B Dorian = B-C#-D-E-F#-G#-A.

G# minor pentatonic = G#-B-C#-D#-F#.

G# Dorian = G#-A#-B-C#-D#-E#-F#.

Bars 1-4 are the B Dorian part. Bars 1-3 are minor pentatonic. One has to wait till bar 4 till the other two Dorian notes turn up. Bars 5-11 are the G# Dorian part. The A# is part of the vamp and harmonies. It's hexatonic rather than pentatonic. It might be attributed to both Aeolian and Dorian and the E natural in bar 10 suggests Aeolian. When you continue listening to the remainder, this E/E# is present as E#, so it's actually Dorian.

I could go on like this, getting repetitive. In my own study I'm calling sections from the following titles specifically pentatonic:

- Run home slow: main theme.

Over a figure upon B, a melody is played, that is purely pentatonic. Upon B as tonic it would be B minor-2 pentatonic in Brett's terms (see below). The accompanying figure also includes a D, establishing a minor or Dorian environment (the G/G#, that makes the difference, is absent).

- Hungry freaks, daddy: section.

The C pedal part follows the major pentatonic scale.

- King Kong: theme.

In my Weasels ripped my flesh section, I'm reproducing the analysis of Wolfgang Ludwig of the main theme, explaining it as a Dorian-pentatonic alternation.

- No waiting for the peanuts to dissolve.

Here I've transcribed a pretty large block of 8 bars being almost entirely pentatonic. The piece as a whole does include the other notes from the Dorian scale.

- Underground freak-out music.

This solo begins as entirely pentatonic. One has to wait till the second half to hear the other notes from the Dorian scale.

In case of Zappa, the Dorian environment of minor pentatonic is clear. One might discuss about when one should call something just pentatonic or just Dorian. But when you're describing the above as Dorian with pentatonic passages or pentatonic passages in a Dorian environment, there isn't any reason for a discussion anymore. As said, it's both instead of one or the other.

minor-1 pentatonic



The musical notation shows a piano accompaniment for the minor-1 pentatonic scale. The right hand (treble clef) plays a sequence of notes: C4, D4, E4, F4, G4, A4, B4. The left hand (bass clef) plays a constant C4 pedal point. The key signature has one flat (Bb).

minor-2 pentatonic



The musical notation shows a piano accompaniment for the minor-2 pentatonic scale. The right hand (treble clef) plays a sequence of notes: C4, D4, E4, F4, G4, A4, B4. The left hand (bass clef) plays a constant C4 pedal point. The key signature has one flat (Bb).

major pentatonic



The musical notation shows a piano accompaniment for the major pentatonic scale. The right hand (treble clef) plays a sequence of notes: C4, D4, E4, F4, G4, A4, B4. The left hand (bass clef) plays a constant C4 pedal point. The key signature has one flat (Bb).

Pentatonic scales according to Brett Clement. A Study of the Instrumental Music of Frank Zappa, page 319.

Minor-1 pentatonic, whose pitch content derives from the first five-note segment of a Lydian system, is identical to the traditional “minor” pentatonic scale. As indicated on Example 4.32, the tonic of this scale is the Dorian pedal. Therefore, the minor-1 pentatonic should be viewed as a scalar segment of the Dorian mode rather than the Aeolian mode. Zappa’s music confirms this contention conclusively, as minor-1 pentatonic is often expanded to include the remaining pitches of the Dorian mode. This tendency is most prevalent in his extended Dorian-mode guitar improvisations, wherein the pitch collection of the minor-1 pentatonic scale often constitutes the majority of the solo, while occasional pitch expansions are made by including one or both of the remaining Dorian pitches (scale-degrees 2 and 6).

Description of minor pentatonic by Brett. Idem, page 145.

c. Segment 3: Major.

Compared to the two minor-pentatonic forms, the major pentatonic is less commonly encountered in Zappa’s instrumental music. The major pentatonic is generated from the third five-note segment of the Lydian system (see Example 4.32). As shown, the tonic of the major pentatonic is determined to be the Mixolydian pedal, and conclusively *not* the Ionian (as is traditionally taught) or the Lydian pedal. Therefore, if one were to encounter a passage fully

comprised of the major pentatonic collection, one would expect the pedal/tonic to be Mixolydian.

Another possible manifestation of the major pentatonic scale—one encountered much more often in Zappa’s music—is as the pitch collection of the melodic zone in Lydian contexts. This description fits the employment of the major pentatonic in the main theme of the ECE version of “Dupree’s Paradise” (1973/1988c) (see Example 4.38). The pedal utilized here is the Lydian pedal B, while the accompaniment formations above this pedal suggest an outgrowth of T7-cycles from the pedal, specifically the repeated Bs of the bass and the F#-major chord of the piano (i.e., E-B-F#-C#). The melody completes the E-Lydian scale, being comprised of the major pentatonic segment of the Lydian system, pitches #3–#7 of the Lydian fifth-stack. Here, the pentatonic scale is in the form of the “black notes” on the keyboard. The construction of the melody, with its emphasis of the perfect fourth C#-F#, lends itself to a major pentatonic interpretation with a Mixolydian tonic (F#). Without the pedal on E, in fact, most listeners would likely hear F# as the tonic of this theme.

Description of major pentatonic by Brett. Idem, page 148-9.

In his 2009 study, Brett is talking about this in a way, more similar to what I'm saying.

- The minor pentatonic scale by itself can be seen as part of the minor, Dorian and Phrygian scales. Like me, Brett points at minor pentatonic being present in a Dorian environment, indicating that over longer periods the full Dorian scale can be heard.
- The pentatonic set, that he calls minor-2 pentatonic, also gets explained in a Dorian context.
- The major pentatonic scale gets interpreted in a Mixolydian environment.

At that point the discussion with me about the central role of Lydian didn't yet exist as sharp as in his Response to me. In note 54 from his 2014 article, he mentions:

54 In fact, Zappa’s pentatonic melodies almost always eventually expand to a full diatonic scale. In other situations, the chordal and/or pedal zones supply the missing diatonic pitches.

Which is almost identical to what I'm saying. Only in his Response to me he's getting more ardent about minor pentatonic being a class, separate from Dorian. And major pentatonic not belonging to Mixolydian. For more on this topic:

The Wazoo chapter: the pentatonic/Dorian scale in blues pieces.
The Lydian theory chapter: his discussion with me.

The seventh diatonic note.

This paragraph mentions three findings, that I came along while identifying a large number of keys.

a) It can happen that one of the seven notes, that form a diatonic scale, gets to some degree avoided. One has to listen to or transcribe a larger number of bars to encounter an instance of the 7th note, so that a piece can be positively identified as belonging to a certain key. In some examples in this study, the 7th note is absent. In such cases it remains undecided what exactly the key is. Examples are for instance the "Overture" from "200 Motels" and bars 9-10 from the third "Village of the sun" section. Without an F/F# the "Overture" can be identified as both C major and C Lydian. One might call situations like this "hexatonic".

b) It can also happen that one of the seven notes turns up as both natural and sharp or flat. Here the ambiguity about what key the piece is in, is explicitly present. I present such occurrences as a mingling of closely related scales. These examples are listed in the Guitar section of this study under the Orrin hatch on skis paragraph.

c) There's a preference to compose in keys notated with sharps over those notated with flats. While the first two findings underscore Zappa's flexibility towards scales, this third finding is musically meaningless. It's just a stupid little fact I noticed. One can change the preset sharps and flats simply by transposing from C (all natural) to B (five sharps) or Db (five flats). Analytically nothing changes and only people with an absolute hearing will be able to notice some difference in the position of the tonic. Because it has no meaning, I've not quantified this in a table.

WEASELS RIPPED MY FLESH - YCDTOSA V, DISC I: COUNTERPOINT #1 AND IMPROVISATIONS

COUNTERPOINT IN EARLIER WORK

Much of Zappa's music has its basis in the single melodic line. The chords are often indicated by their symbols and can vary in each version of a song. Counterpoint doesn't play an important role in much of his music. When you listen for instance to "Bongo fury" (1975), the little counterpoint you can encounter are some motifs played by the bass. Hardly any rules apply to Zappa's music however and when you take the little use of counterpoint as characteristic, you will also find sections showing the opposite, together enough to fill a CD with counterpoint exercises. This section focuses on the places where he is applying counterpoint and some of its different appearances. For definition purposes: counterpoint is seen here as any kind of music where more than one more or less individual melodic line is played at the same time.

This section works in conjunction with the "The yellow shark: counterpoint #2" section, this one doing examples from Zappa's earlier work and the latter fills in the picture with pieces composed in the eighties.

1) Classical counterpoint.

What will this evening bring me this morning

Zappa mostly doesn't use classical forms as fugues and canons with imitation in the melodic lines, but sometimes imitation is applied. Take the canon set up of "What will this evening bring me this morning", from "200 Motels" (1971). From 1:35 onwards a second voice is singing one bar after the first voice. Or take the little fragment between 1:07 till 1:12 from "Pound for a brown", "Yellow shark" version.

The image shows a handwritten musical score for the song "What will this evening bring me this morning". It consists of three staves. The top staff is a vocal line in treble clef, with lyrics: "What will I say - the next day - to what-e- ver, I'll drive - to my ho- tel to-". The middle staff is a bass line in bass clef, with lyrics: "etc." and "etc.". The bottom staff is an instrumental line in treble clef, with lyrics: "night - , if things go all right - ." and "(Instr.)". The score is written in 4/4 time and features a key signature of two sharps (F# and C#).

What will this evening bring me this morning, 0:48 till 1:00. Transcription: KS (1st printed edition, 2000).

Handwritten musical score for a canon in D major, 4/4 time. The score consists of two systems of five staves each. The first system includes vocal lines with lyrics "mf What will...", piano accompaniment, and a double bass line. The second system continues the musical development. The score is marked with dynamics like *p*, *mf*, and *mp*, and includes performance instructions like "8vab." and "L34".

From 1:35 onwards this melody is sung as a canon with a second voice singing one bar after the first one. Transcription: KS (details added in 2011).

The "What will this evening bring me this morning" sections above are in E. In both cases the bass plays a pattern with E as the central note. In the first example it's the E alternating with B in a syncopic way. Syncopes also happen at various points in the lead melody. In the second case it's a two-bar pattern with the bass picking the notes E-F#-E-B. In bar 6 of the first example, the bar where the vocals pause, the organ plays a little chord progression: I-IV-I. In the second example the keyboards are improvising in the background. Staff 5 represents the brass, playing an E in a rhythmically irregular way. Whereas the form is classical, the harmonies are less classical. The whole doesn't constitute a sequence of traditional 5th and 7th chords. Instead of that Zappa lets the vocals, accompaniment and bass mingle freely through the scale of E.

2) Counterpoint including complementary harmony.

See the Uncle Meat section for "Mr. Green Genes" and the counterpoint #2 section for "Strictly genteel (1987)".

3) Counterpoint through multiple layers.

See below at "Dwarf nebula processional march & dwarf nebula" from "Weasels ripped my flesh".

4) Counterpoint with shifting harmonies.

Sofa (1976)

Harmonic independency is very explicitly present in the following example from "Sofa" with two-part counterpoint. This song was first included in the setlist of 1971 (see the Fillmore East section), next studio recordings appeared on "One size fits all" from 1975 and a live version from 1976 got included in the "Zappa in New York" album (released in 1978). It's this last recording the following bars stem from:



Previous page: Sofa, Zappa in New York, 1:59 till 2:13. Transcription: KS (1st printed edition, 2000).
Bass: G pedal.

Again both melodies are in the same key, and both move harmonically independently. This is accentuated by the fact that the two melodies, that both are repeated, are of unequal length, namely four and three bars. Thus the harmonic combinations we are getting keep changing all the time. See the "New brown clouds" theme in the "Studio Tan" section for another example. Like its main theme (see the Fillmore East, 1971, section) this section is in 3/4. The bass G pedal note sets the scale to G Mixolydian. For more about the polyphonic set-up of this section, you can look at the "Sofa (1975)" example from the One size fits all section of this study.

5-6) Free counterpoint and counterpoint in an atonal field.

The 1974 version of the "Dog breath variations" can serve as an example of free counterpoint in earlier work. See the Uncle Meat section for a transcription. Another instance is the "Rollo interior" score, of which a section is included in the "St. Alfonso" example from the Apostrophe (') section. The counterpoint #2 section continues with this item with three examples from "The yellow shark" and two from "Everything is healing nicely". "Igor's boogie" from the previous section is an example of atonal counterpoint in earlier work.

WEASELS RIPPED MY FLESH

During the spring tour of 1969 it became noticeable that Zappa was becoming to feel worn out playing with the Mothers in this form. In the press he started complaining about audiences clapping for the wrong reason and continued saying that he felt that he was banging his head against the wall. The band was on a regular payroll and the most economical way to end the situation was to disband the group. Zappa took this step in August, but continued working with his two best skilled musicians, Ian Underwood and Art Tripp (the latter would soon join Beefheart's Magic band). It shows that he could be ruthless as it came to pursuing his ideas. The story about Duke Ellington begging for an advance in The real FZ book seems awkward. More convincing is what he said in the press directly afterwards, namely that it was time to work upon the material already recorded, rather than trying to keep doing the same thing over and over again. With "Hot rats" in progress he was heading for new directions with session musicians and he wanted to close the first Mothers period.

The first idea was to come up with a 12-record set, called "The collected history and improvisations of The Mothers of Invention". His record company wasn't interested, so he advertised for it, trying to sell the records individually by mail order. All had names by now, indicating that they went back to early pre-Mothers recordings. The next year however two albums from the set were regularly released, leaving ten in stock. As time progressed in the seventies he lost interest in the project, saying that his current band could do better. Even so, eventually more than the quantity of a 12-record set became available (see below at the bottom of this section).

1. Didja get any onya?

Next are some compositions that have a prescribed framework, but mostly are improvisations. First are two riffs from "Didja get any onya?" over which the brass section improvises. Both riffs are in odd meters. The first one is in 7/16.

Fast

mf (Not strict, by approximation)

Two times

Keeps repeating

mp (Strict)

Keeps repeating

Keeps repeating

Bva bassa (Strict)

mf (Strict)

(Acc. continues)

pp

mf

p

mf

Didja get any onya?, opening riff/melody. Transcription: KS.
Both examples: update 2006, 3rd printed edition 2007.

Fast

p (Not strict)

mf

Keeps repeating

p (Strict)

Keeps repeating

mf (Strict)

mp (Acc. continues)

p

Didja get any onya?, central riff/melody. Transcription: KS.

The scale is here F# Phrygian with the A altered to A# half of the time. Bass and keyboard form the F#7 chord. The second one in 14/16 is also present in "Charles Ives" from "YCDTOSA Vol. V" and "The blimp" from Beefheart's "Trout mask replica" album, which Zappa produced. The key here is C Lydian and the accompaniment is now making a chord progression: an alternation of I and VI 7th.

2. Directly from my heart to you

"Directly from my heart to you" is a blues song by Richard W. Penniman (artist name Little Richard). This cover features Don "Sugarcane" Harris as a guest player once more. See the Hot rats section for an example of his violin playing.

3. Prelude to the afternoon of a sexually aroused gas mask

"Prelude to the afternoon of a sexually aroused gas mask" is one of the six live tracks from "Weasels ripped my flesh". The title can only be a reference to Debussy's "Prélude a l'après midi d'un faune".

It's a collage of a number of live routines the Mothers did in the late sixties:

- 0:00 It starts off with Don Preston, being credited for "electronic effects".
- 1:01 Part in 5/16 with a little sax solo. Switching to 5/16 belonged to the standard repertoire of the band playing live. See the Absolutely free section for Art Tripp explaining how Zappa used to indicate it. Other examples in this study are "Prelude to King Kong" and "Ian Underwood whips it out". The last one with two figures in 5/16 becoming a 10/16 meter. While the bass is playing a pedal A, both the lead sax from staff 1 and the second sax from staff two are playing over it in a semi-diatonic, semi-chromatic manner. In bars 1-2 the saxes are for instance mostly using notes from what you might call Db.
- 1:20 The hysterical vocal act by Roy Estrada. The band can join every now and then by singing low clusters and squeaks, following hand signals by Zappa. Above to the right one of these signals (taken over from the Dominique Chevalier book, page 15).
- 2:55 The snorks routine, accompanied by a keyboard part (material from Tschajkovky's 6th symphony, played in a pastiche-like manner).
- 3:38 Closing chord, rushing and vibrating.
- 3:47 End.

The image shows a musical score for a piece in 5/16 time. It consists of four staves. The first staff is in treble clef, the second in treble clef, the third in bass clef, and the fourth in bass clef. The tempo is marked 'mf' (mezzo-forte). The score begins with a first-measure rest (1) and features several triplet markings (3) over groups of notes. The notation includes eighth and sixteenth notes, rests, and triplet markings. The key signature has one flat (Bb).

6

Prelude to the afternoon of a sexually aroused gas mask, section. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

4. Toad of the short forest

The first minute of "Toad of the short forest" goes back to the Studio Z period, when Zappa was writing some music for the intended "I was a teenage maltshop" opera. Two examples are included in the Projects section. Next you've a sax solo being played over some of the vamps Zappa applied to his live concerts. At one section a complicated polyrhythmic figure is formed with three meters being played simultaneously. The Roxy section gives an overview of similar examples, included in this study. In this case Zappa informs the audience about what's happening: drummer A playing in 7/8, drummer B playing in 3/4, the bass playing in 3/4, the organ playing in 5/8, the tambourine playing in 3/4, and the alto sax is blowing its nose.

5. Get a little

"Get a little" is a pedal note solo, the solo itself largely being in E Dorian with a G as minor third. If I'm not mistaken the accompanying chord can also be major with G-sharp, thus mingling Dorian with Mixolydian. At 1:18 it does definitely sound as Mixolydian with also the guitar playing a G#. It's an example of a solo that has something that you might call a main theme and it has a coda:

- 0:00 Intro with people coughing and talking.
- 0:10 Statement of a theme, that gets varied upon.
- 0:36 Free improvisation.
- 2:15 Coda with a chord progression.
- 2:23 "We'll be back in a little while".
- 2:30 End.

1 Guitar Fast
8va ->

(pulsing)

5 8va ->

9 8va ->

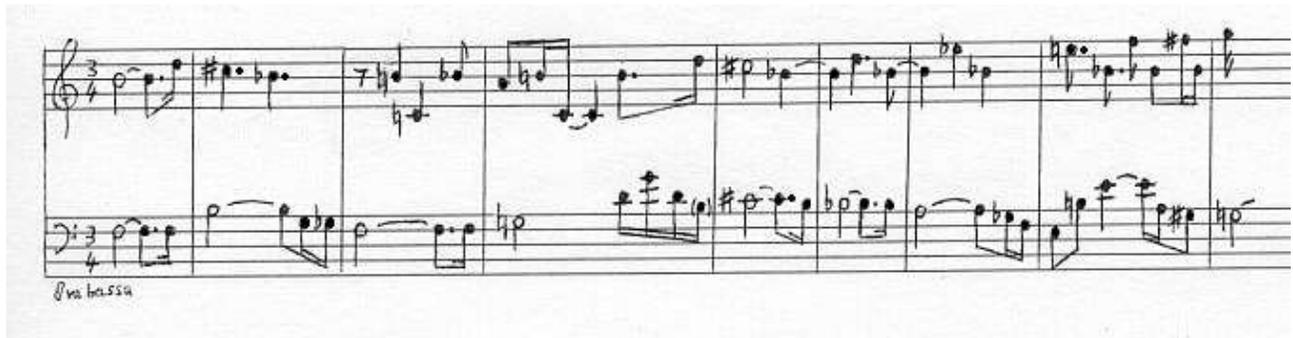
Get a little, 1:16-1:26. Transcription: KS (update fall 2019, deposited at the I-depot, The Hague)

As it comes to musical notation one has to choose between Dorian (with the G# being an altered note) and G Mixolydian (with the G natural being an altered note). Or one can decide to modulate a couple of times. The example above has both Zappa and the accompaniment using Mixolydian during bars 1-5. From bar 6 onwards Zappa returns to Dorian, while the accompaniment keeps using the major triad upon E. So here it's mixed. This mingling of closely related scales occurs frequently in Zappa's music (see also the Guitar section of this study for an overview). It happens on paper (e.g. the opening of "Echidna's arf (of you)") and in improvised music, both by soloists and the accompaniment. Sometimes one scale dominates in a piece as a whole, sometimes two notes appear as natural and altered in amounts that approach each other. There is a degree of choice in Zappa's music: it was allowed to switch between closely related scales. For musicologists such behaviour is inconvenient. They like to come up with theories, formulas and overarching explanations. Even the number of bars in compositions of Bach has been given a special meaning. Zappa kept changing his compositions all the time, so keys can vary, the numbers of bars, the harmonies, new themes got inserted, others got removed etc. In his case it can already get difficult to come

to an accurate description of one composition. One always has to bear in mind what version you're talking about and sometimes the right vocabulary isn't available. In case of the above there's no musical term that covers switching between Dorian and Mixolydian as you like.

6. The Eric Dolphy memorial party

Rhythmically the "Eric Dolphy Memorial Party" example from below contains two strings with accelerations through a 3/4 meter by shortening the lengths of the notes, causing many syncopes. It gets applied during bars 1-4 and bars 5-8. To a point the second set of bars can be seen as a (character) variation upon the first set. As Ludwig writes about the second set on page 116 of his study from 1992: "In this case the hemiolas are the starting point of another peculiarity. First the bow between the last eighth note of the hemiolas and the first fourth note of the next bar draws your attention [bars 6-7]. When following the note sequence, an acceleration of the pulses becomes clearly notable. This effect of acceleration is not caused by speeding up the tempo, but by a rhythmic formation in the shape of a row. It starts with two half notes, followed by two dotted fourth notes, two fourth notes, two dotted eighth notes, two eighth notes, ending with two 16th notes." Included as well below are bars 9-22 from the Ludwig study, stressing the atonal character of this piece.



The Eric Dolphy memorial party, opening bars. Transcr. Wolfgang Ludwig (1992), bass added by KS.

To what extent the bass line in this song is prescribed is debatable, my best guess is that Zappa wrote out the melody with per bar a bass pedal note (as he did in "The black page", that has been officially published). The bass player could then improvise along this pattern. Zappa has sometimes been accused of taking too much credit of the songs. "Weasels of ripped my flesh" is an album with a lot of improvisation, estimated at 80% by Zappa himself. But if you ask yourself if then it shouldn't be credited as a group effort, then you have to take into account that: in all rock and jazz music the writer of the basic themes gets the credit and the soloists never, Zappa himself is improvising on guitar, "Directly from my heart to you" is a cover and Zappa is the one directing, editing and compiling the album. Without the prescribed material it would have been a set of loose ends.



The Eric Dolphy memorial party, bars 1-22 as transcribed by Wolfgang Ludwig.

7. Dwarf nebula processional march & dwarf nebula

"Dwarf nebula processional march & dwarf nebula" from "Weasels ripped my flesh" opens with an interesting counterpoint showpiece, where several (sped up) melodies are played simultaneously in different combinations. The first four melodies are given beneath:

First four melodies from Dwarf Nebula. Transcription: KS (1st printed edition, 2000).

Note: melody A should have been notated an octave lower; some details renewed in 2012.

They are subsequently played in the following combinations: A-B, A-C, A-B and A-C-D. Theme A is permanently present and moves from the A chord towards the F#m chord, leaving it a bit in the middle whether you should see A or F# as key note. Though all melodies use the scale of A (or F# minor) with a few alterations, their harmonic and rhythmic movements are more independent of each other, giving the melodies more individuality than in the Sofa example from above. Melody A is an easy folk tune like one, opening with I-V (no 5th)-VI 5th in A. Melody D is harmonically the most exotic one, opening for instance with what you might call a 9th chord on C sharp (C#-E-D) and a chromatic passage. The combination of these two openings can't be called harmonically complementary. It's an example of Zappa saying I can do whatever I want as it comes to harmony and counterpoint, and still the result becomes a logic sounding unit. Rhythmically melody B opens with several syncopes.

8. My guitar wants to kill your mama

Next is an example from "Weasels ripped my flesh" (1970), where Zappa includes an atonal section in an interlude for a rock song. The construction of track 8 from this CD, "My guitar wants to kill your mama", gets described below. It begins with ticking rapidly on the G chord without the 3rd, a standard from the fifties comparable to the opening of "No, no, no". The lyrics also follow rock song topics, rather than being related to Zappa's own life (unless I've missed something in the biographies). The opening is ambiguous about its use of scales. In a wider context it should be seen as G Dorian, because the same set-up is used for the verse and refrain, appearing five times in total. The opening however mingles G Dorian for the sung part with G Mixolydian for the accompaniment, because both the Dorian Bb and the Mixolydian B are used. Specific for the opening is that Zappa puts an F beneath it as pedal note, while the sung part and the accompaniment are on G. All other instances are on G for everybody. The other official "My guitar" version from "YCDTOSA IV" doesn't have this lower note beneath it neither. There both the bass and melody begin in D Dorian. If you do take the F as keynote nevertheless, the opening would be in F major mingled with F Lydian, but seen the general construction of this song it can better be taken as an incidental variation.

Verse

- 0:00 Phrase 1 ("You know ..."), as described above.
- 0:26 Phrase 2 ("I get ..."). The song moves over to step IV of G Dorian, equal to step I of C Mixolydian for its continuation in phrase 3.
- 0:30 Phrase 3 ("I call ..."). C Mixolydian, now modulating briefly to D Mixolydian by moving up a second via parallels.

Refrain

- 0:34 Phrase 1 ("My guitar ..."), G Dorian.
- 0:43 Phrase 2 ("My guitar ..."), step IV or C Mixolydian.
- 0:48 Phrase 3 ("I get ..."), D Mixolydian.
- 0:50 The melody modulates back to G Dorian.

Verse

- 0:52 Phrase 1 ("Later I ..."), G Dorian.
- 1:09 Phrase 2 ("I get ..."), step IV or C Mixolydian.
- 1:14 Phrase 3 ("I crawl ..."), D Mixolydian.

Handwritten musical score for "My guitar wants to kill your mama". The score is written on multiple staves and includes various musical notations and performance instructions.

Section 1 (Measures 1-4):

- Staff 1 (Guitar): mp (mezzo-piano). Repeats. Etc.
- Staff 2 (Bass): mf (mezzo-forte). Continues like bar 1.
- Staff 3 (Bass): mf plus *avabasso*. Bars 1-2 keep repeating.

Section 2 (Measures 5-7):

- Staff 2 (Bass): mf You know... (with triplets). Bars 6-7 keep repeating.
- Staff 3 (Guitar): (Acc. continues) mf . Bars 6-7 keep repeating.

Section 3 (Measures 10-12):

- Staff 2 (Bass): mf . (7:8 triplet).
- Staff 3 (Guitar): mp (mezzo-piano). (7:8 triplet).
- Staff 4 (Bass): mp (mezzo-piano) then mf (mezzo-forte). (6:8 triplet).
- Staff 5 (Bass): mf . (3:8 triplet).

Section 4 (Measures 13-15):

- Staff 2 (Bass): mf (allegro indicated).

My guitar wants to kill your mama, 0:00-0:28. Transcription: KS (4th printable edition 2012).

The image shows a handwritten musical score for the song "My guitar wants to kill your mama". It consists of three systems of staves, each with a key signature of one sharp (F#) and a 4/4 time signature.

- System 1:**
 - Staff 1 (Vocals): Labeled with a circled '1'. The lyrics "Screaming --- no more." are written above the staff. The music is marked *mf*.
 - Staff 2 (Guitar): Labeled "Gva". The music is marked *pp*.
 - Staff 3 (Piano): Labeled "mf".
 - Staff 4 (Bass): Labeled "mf".
 - A bracket on the right side of the system is labeled "Keep repeating alike".
- System 2:**
 - Staff 1 (Vocals): Labeled with a circled '2'. The music is marked *mp*.
 - Staff 2 (Guitar): Labeled "Gva".
 - Staff 3 (Piano): Labeled "Gva".
 - Staff 4 (Bass): Labeled "(others continue)".
- System 3:**
 - Staff 1 (Vocals): Labeled with a circled '3'. The music is marked *mp*.
 - Staff 2 (Guitar): Labeled "Gva".
 - Staff 3 (Piano): Labeled "Gva".
 - Staff 4 (Bass): Labeled "Lothers stop) Bass: plus Gva bass".
 - The text "Keeps repeating" is written below the bass staff.

My guitar wants to kill your mama, 1:16-1:34. Transcription: Paul Strawser (bars 2-5)/KS (bars 1, 6-8); 4th printable edition 2012.

Interlude

- 1:18 Section 1. Bar 1 of the transcription below is the last one from the previous verse. It gets followed by a bridge of three instrumental sections, that are unrelated to each other and the central themes, thus forming a little collage. Only a few of notes/chords facilitate the transitions. From bar 1 to 2 only the bass D pedal note continues for letting the interlude segue. Here it gets atonal and very irregular with intervals changing all the time (it's sometimes hard to hear the exact notes). Rhythmically it begins off-beat in bar 2, moving over to mostly on-beat for the next three bars. Two instruments are playing fast in high registers, so it has to be sped up to double speed.

- 1:27 Section 2. A melody in B minor. Due to the fact that the last two chords from the previous theme are relatively long held, this theme can begin as good as overnight. It's another example of a short irregular through-composed melody that can be following both traditional and untraditional chords. Beat 1 of bar 6 could for instance be interpreted as VII 9th and beat 3 as I 7th.

- 1:36 Section 3. Guitar solo in A Mixolydian.

Verse

- 1:53 The verse repeats like at 0:52.

Refrain

- 2:19 The refrain repeats like at 0:34.

Outro

- 2:36 Guitar solo in G Dorian.

- 3:32 End.

9. Oh no

The score of "Oh no" is available in The Frank Zappa songbook, vol. I, pages 57-58. It's the version with lyrics. The opening of the instrumental version from 1967 is included in the Lumpy gravy section of this study. The Weasels ripped my flesh version ends with what you might call a transitory theme for the next "The Orange County lumber truck" track. This theme returns in a different shape as the first theme from "Son of Orange County" from the later "Roxy and Elsewhere" album. So here this theme is part of the "Orange County" song. A transcription of its lead melody is included in the corresponding section. During "Oh no" this theme is played over a I-IV alternation in C# Dorian.

10. The Orange County lumber truck

"The Orange County lumber truck" knows a number of themes and episodes:

- 0:00 Theme 1 in F# Dorian. The basic chords are F#m7 and G#m7. The bass begins with F# at this point.

- 0:15 Mini solo in C# Dorian, played over a C#m-D#m alternation. The meters switch from standard 4/4 to a 6/8-6/8-2/4 sequence, played three times.

1



5

9

The Orange County lumber truck, opening. Transcription: KS (update Summer 2019, deposited at the I-depot, The Hague).

- 0:26 Theme 2 in A Lydian with A and B as accompanying chords.
- 0:45 Second mini solo over the C#m-Dm alternation. Zappa largely avoids the A/Ab during these two mini solos, turning up only once at 0:53, being natural. The C#m and D#m chords at some points get played as just the thirds, at other points as complete triads.
- 0:58 Theme 2.
- 1:01 Theme 2 transposed down to G Lydian.
- 1:05 Theme 1 beginning as if transposed up to A, but harmonized differently, using A Mixolydian. The basic chords are now A9 and Bm11.
- 1:21 G#m-C# alternation (G# Dorian), followed by Bm-E (B Dorian).
- 1:34 Guitar solo, beginning with the band just playing the F#m chord. See the next track below.
- 3:17 The solo gets cut off for human voices.
- 3:20 End.

A musical score for 'The Orange County lumber truck' in 4/4 time, key of D major. The score consists of five staves. The top staff is a vocal line starting with a '1' above it. The second staff is a guitar line. The third staff is a keyboard line. The fourth and fifth staves are bass lines. The music features a mix of eighth and sixteenth notes, with some triplets and a fermata in the final measure of the fifth staff.

The Orange County lumber truck, 1:05-1:12. Transcription: KS (update Summer 2019, deposited at the I-depot, The Hague).

11. Weasels ripped my flesh

A handwritten musical score for 'Weasels ripped my flesh' in 4/4 time, key of D major. The score is divided into two systems. The first system includes staves for Guitar (Guitar 8va), Keys (mf), Brass (mp), and another Keys (mf) staff. The second system includes staves for Ovabassa (mf), Keys (continues), Brass (pauses), and another Ovabassa staff. The score contains various annotations such as 'Coughs', 'Laughter', 'NO METER', and 'Cluster of keyb. keys with feedback'. It also includes a note that the piece 'Lasts over two minutes'.

The Orange County lumber truck solo - Weasels ripped my flesh, transition. Transcription: KS (update 2006, 3rd printed edition 2007).

During the Berlin concert of 1968 the rebellious student audience tried to climb on stage and Zappa asked Don Preston to press all keys to scare off the crowd. The incident exists on film and was presented in L.A. colleges as part of the short "Burnt weeny sandwich" movie (still above in this page). Apparently Zappa liked the effect, so they could do it again during normal concerts. Don already used a rushing sound in the examples below and by clustering the keys you get the big blast of rush with feedback as on "Weasels ripped my flesh". It follows upon a guitar solo that gets cut off and its shock effect never fails.

The transcription contains the end of the solo, that concludes "The Orange County lumber truck". It's in 4/4 in the key of F# Dorian. It gets cut off precisely at the end of a meter. After this everything continues without a meter. First you can hear some people laughing and coughing for some seconds, next the big dissonant chord follows, sustained for two minutes. "YCDTOSA Vol. V" is additional to "Weasels ripped my flesh" with a lot of experimental stuff, conversations and improvisations. To the right an outtake from the fantastic drawing by Neon Park, illustrating the pacific beauty of several of the album's themes, getting brutally ended by a weasel ripping your flesh.

YOU CAN'T DO THAT ON STAGE ANYMORE VOL. V, DISC I

The whole disc I of "YCDTOSA Vol. V" is devoted to the original Mothers of invention, as they played live at the end of the sixties. Regarding content it fits very well into the idea of the "collected history and improvisations of The Mothers of Invention". There are story-telling pieces in it and a lot of improvisations. The "YCDTOSA" series has a section of its own in this study, with examples from each CD.

Baked-bean boogie - No waiting for the peanuts to dissolve

Baked-bean boogie, opening. Transcription: KS (update 2006, 3rd printed edition 2007).

"Baked-bean boogie" from vol. V is Zappa himself soloing. It's a solo in Eb Dorian over a bass riff. It turns out to be an outtake from the "Uncle Rhebus" track, that the ZFT included in their "Finer moments" release from 2012. See the Uncle meat section for a description and examples from "Uncle Rhebus". In the YCDTOSA section at Vol. V you can find an overview of examples from this CD in this study.

"No waiting for the peanuts to dissolve" is another instrumental with subsequently Lowell George, Zappa and Bunk Gardner soloing. The section with Zappa on lead guitar is the best example of pentatonic music, that I've encountered so far. Zappa's music can frequently contain pentatonic passages, but here you can hear the pentatonic scale being used over a longer period by the whole band. Upon the tonic this set is E-G-A-B-D. At some points you can also hear an A#, C and C#, but these are more chromatic passing notes. Staff one from the example is Zappa, staff two is Lowell George. Pentatonic episodes are in case of Zappa always embedded in diatonic environments or being played next to other scales. In this case the piece as a whole is in E Dorian, which is why I've also notated this section as if in E Dorian. The F# from this scale isn't touched upon at all in this example.

The image displays two systems of handwritten musical notation for the piece "Baked-bean boogie".

The first system consists of four staves:

- Staff 1 (Guitar):** Labeled "Guitar". It features a melodic line with various techniques including triplets (marked "3"), sixteenth-note runs (marked "6"), and a final triplet marked "7:8".
- Staff 2 (Keyboard):** Labeled "Keyb.". It provides harmonic accompaniment with chords and moving lines.
- Staff 3 (Bass):** Labeled "Repeats". It shows a rhythmic bass line that repeats throughout the system.
- Staff 4 (Bass):** Labeled "Asbar 1". It shows a different bass line, possibly for a second bassist or a specific arrangement.

The second system also consists of four staves:

- Staff 1 (Guitar):** Continues the melodic line with more complex rhythmic patterns, including triplets and sixteenth-note runs.
- Staff 2 (Keyboard):** Continues the harmonic accompaniment.
- Staff 3 (Bass):** Continues the "Repeats" bass line.
- Staff 4 (Bass):** Labeled "Keeps repeating". It continues the "Asbar 1" bass line.

The notation includes various musical symbols such as accidentals (sharps), stems, beams, and dynamic markings, all written in a clear, legible hand.

Sva-->

Sva-->

(Bass continues as bars)

No waiting for the peanuts to dissolve, section. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

Chocolate Halvah

-vah --, Hal- vah--

mf

-oh--

mp

f

mf

Bass

Drums mf

repeats

repeats

repeats

Guiro

repeats

repeats

repeats

Handwritten musical score for "Chocolate Halvah". The score is in 4/4 time with a key signature of one sharp (F#). It consists of five staves. The top staff is a vocal line with lyrics "Cho-colat Hal-vah--" and a triplet of eighth notes. The second staff is a vocal line with dynamics "p" and "mp". The third staff is a bass line with dynamics "p" and "mf". The fourth staff is a rhythm guitar line with dynamics "p" and "mp". The fifth staff is a bass line with dynamics "p" and "mp". There are handwritten notes: "Bass continues Like bar 4" and "Drums continue as standard 4/4".

Chocolate Halvah, 2:39 till 3:05. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

In "Chocolate Halvah" Zappa is responsible for creating an environment with some fixed elements while others can improvise. In this case this environment is formed by the drums/guiro - bass - rhythm guitar combination as represented in staves 4-5 and the two percussion lines of the example, bars 1-3. It's some sort of vamping figure with the percussion standing central. The bass and rhythm guitar vary a little. Roy Estrada is "swami #1", singing the notes of staff one. Lowell George sings staff two as "swami #2". Both get co-credited for their contribution. To the right: Zappa and Lowell George.

There's a bass pedal and a bass E-D-E figure during most of this song, while the "rhythm guitar" from staff 4 scratches notes from E Dorian. Apparently both staves 3 and 4 are played by Zappa. Lowell George gets credited for playing guiro, a Latin percussion instrument, that creates rattle-like sounds. Because of the chromatic notes of the sung part, however, the atmosphere gets between diatonic and atonal. Towards the end regular guitar chords enter the picture. These chords set the character of piece firmly towards diatonic playing in E Dorian. In bars 3-8 it's two times I-IV-III. When these chords are coming in, the characteristic drum beats of bars 1-3 are left to make place for standard 4/4 drumming.

Underground freak-out music

"Underground freak-out music" is another example, where Zappa is responsible for setting up the outlines of a song, while Lowell George and Don Preston are the soloists in it. He introduces this piece as "This is underground psychedelic acid rock freak-out music". Both the guitar and keyboard/electronics parts are using fuzz tones. At some points I'm not even sure who's doing what. The bass part is a rapidly pulsing Eb pedal note, something the later hard rock fans became to crave for.

The image shows two systems of handwritten musical notation. The first system includes three staves: 'Guitar' (top), 'Fuzz' (middle, with a brace), and 'Bass' (bottom). The guitar part starts with a treble clef, key signature of two flats, and a 12/8 time signature. It features a melodic line with accents and a dynamic marking of *mp*. The Fuzz part has a bass clef, the same key signature, and a 4:3 time signature. It contains a rhythmic pattern of eighth notes with a dynamic marking of *mf*. The Bass part also has a bass clef, the same key signature, and a 12/8 time signature, playing a steady eighth-note pattern with a dynamic marking of *mf* and the instruction 'Keeps repeating'. The second system includes four staves: 'Guitar' (top), 'Fuzz' (middle, with a brace), 'Bass' (bottom), and another 'Bass' staff (bottom). The top guitar staff is labeled 'Fuzz guitar' and has a dynamic marking of *mf*. The middle Fuzz staff has a dynamic marking of *p*. The bottom Bass staff has a dynamic marking of *mf* and the instruction 'Continues as bar 1'. The bottom-most Bass staff has a dynamic marking of *p*. The second system includes time signatures of 4:3 and 4:3.

Underground freak-out music, 0:05-0:26. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

The song starts off as pentatonic. The example above, with the first eight bars, is entirely pentatonic except for a D natural passing note. It takes a while before the other two diatonic notes introduce themselves. A C appears in the guitar part at 0:47 minutes and as an Ab-C chord by the saxes at 1:14. From 1:28 onwards the song becomes regular Eb Dorian with the total scale being involved, including the F.

The collected history and improvisations of The Mothers of Invention

The chances that the original "The collected history and improvisations of The Mothers of Invention" set will ever be released have become about nil. The actual releases of material with the original Mothers from 1970 onwards would be differently. First two 1970 albums from the set were released individually. During the nineties Zappa released two live CDs, entirely made up of material with the original Mothers of invention: the already mentioned "YCDTOSA Vol. V", disc 1, and "Ahead of their time". With the ZFT releases, the total amount is still augmenting:

- FZ albums that were part of "The collected history...":

- 1) Burnt weeny sandwich

- 2) Weasels ripped my flesh
- *Other FZ albums:*
- 3) Ahead of their time
- 4) YCDTOSA I: 3 tracks
- 5) YCDTOSA IV: 3 tracks
- 6) YCDTOSA V: disc I
- 7) The lost episodes: tracks 1-22
- 8) The mystery disc
- *Single collections:*
- 9) Rare meat/Cucamonga years/Cucamonga
- *ZFT releases:*
- 10) Joe's domage
- 11) Joe's Xmasage
- 12) MOFO
- 13) Lumpy Money
- 14) Greasy love songs
- 15) Road tapes, venue #1
- 16) Finer moments
- 17) Meat light
- *Bootlegs from the Beat the boots series:*
- 18) 'Tis the season to be jelly
- 19) Our man in Nirvana
- 20) Electric aunt Jemima
- 21) At the Ark

It's impossible to say what would be on the remainder of ten records. But what you can say is that the amount in minutes on official releases by now (i.e. since 2012, after two more double CDs by the ZFT) has become bigger than what would be on the 12-record set. And when you include the four bootlegs it by far exceeds the quantity of the "Collected history...". The sound quality of the bootlegs varies between poor and listenable, but for sixties bootlegs they are surprisingly well. "Electric aunt Jemima" is close to a normal sound quality. "The Ark" is a concert that Zappa himself recorded as well for a possible album release. These bootlegs give an opportunity to listen to an arbitrary Mothers concert from the sixties as they used to be. They were full off improvisations and extensive soloing. I guess you could say that the "Collected history..." mostly has become available, though in a different form. In December 2010 Gail Zappa gave the final verdict upon the status of the 12-record set (<http://www.zappa.com/gzsez/questions/questions/>): "Thoroughly dissected and resectioned and much of it resequenced and recollected into other existing releases. Hard to know today exactly what the original material consisted of."

Comedy shows and 200 Motels (1970-1971)

In 1970 Zappa met Howard Kaylan and Mark Volman, former singers of The Turtles. He asked them to become the front men of his new band. At first this new line-up of the Mothers of Invention started where the previous band had stopped, with newly written material appearing on *Chunga's Revenge*. Next they started working on specific subjects, building comedy acts around them. The groupie opera was released on Fillmore East, while *Billy the Mountain* appeared on *Just Another Band from L.A.* A third sequence, *The Sofa Suite*, only became completed with the 1992 release *Playground Psychotics*. With *Uncle Meat* still unfinished, Zappa did manage to film *200 Motels*, a movie about a band on the road. The soundtrack offers a bewildering variety of styles, featuring modern orchestral works as well as rock band pieces. The orchestral works were also planned to be performed in the shape of *The Suites*, but the direction of the Albert Hall cancelled the concert when they noticed that they considered some of Zappa's lyrics obscene. Eventually *The Suites* did appear on CD in 2015. The 1971 tour ended with disasters. In Montreux the concert hall took fire and in London Zappa got thrown off stage.

CHUNGA'S REVENGE: MAINSTREAM POP

Incidentally Zappa met the former singing duo of The Turtles, Mark Volman and Howard Kaylan. They had visited the Zappa concert in the L.A. Pauley Pavilion with Zubin Metha conducting the L.A. Philharmonic. They were in legal conflicts with their manager and other band members and in a difficult working position. The contracts ruled out that they could perform as The Turtles; they even weren't allowed to use their own names as name for a duo. Zappa offered them an opportunity to work with him and they chose to call themselves the Phlorescent Leech and Eddie, mostly shortened up as Flo and Eddie. They made their first appearance on "*Chunga's Revenge*" (1970).

In 1970 Zappa was busy forming the second line up of the Mothers of Invention and restarted touring. To give this band some new material of its own, "*Chunga's Revenge*" was released with a mixture of studio and live music. The album contains some more accessible material with for instance a traditional blues piece "*Road Ladies*", the relaxed "*Sharleena*" and a riff-based song called "*Tell me you love*".

1. Transylvania boogie

Originally "*Transylvania boogie*" was a composed instrumental instead of the largely improvised version of this song on "*Chunga's Revenge*". Here Zappa is using various scales, among others gypsy type ones (as already noticed at www.zappateers.com by member "Mosschops"). The gypsy scale exists in a few variants, that have in common that they include one or two augmented seconds. It still has seven notes in it, as a diatonic scale, thus this augmented second gets compensated by extra minor seconds. Another feature of the "*Ahead of their time*" version is that it's using two meters simultaneously all through. The rhythm section plays in 3/4, while the lead melody is either in 4/4 or in 8/4. On "*Ahead of their time*" you hear the band playing three themes, harmonized in various ways:

- Theme I: pick-up bar and bars 1-2 of the first transcription. This theme is played in two variants, each lasting 8/4. When it returns after theme III has ended, it gets played at double speed. The bass is using an A as pedal note for most of this song, but here also turns to E. Over this A by the bass you see the following scales being used:

- a) A-Bb-C#-D-E-F-G (the F is present in the preceding bars).
- b) C#-D-E-F-G-A-B.

Because of the ongoing D chord and a secondary E in the bass line, the A of the bass at this point loses much of its function as a tonic for the whole. The first scale is a gypsy type one with an augmented second (Bb-C#), the second is a self-created one. It's thus likely that this reference to the gypsy scale is also responsible for the title of the song and the gypsy scene on the inside album cover by Cal Schenkel

(outtake to the right). Transylvania is a region in Eastern Europe and most European gypsies live in Eastern Europe. The vacuum cleaner from the album cover returns in "200 Motels" and the 1970 VPRO documentary, where it's shown how it can be used for "stimulating pies" (televised on Dutch TV).

- Theme II: bars 3-8. A shorter theme in 4/4, also played in two variants. Here Zappa is applying normal A Mixolydian with the bass setting the A as tonic, as usual:

c) A-B-C#-D-E-F#-G.

- Theme III; bars 8-16. Another theme lasting 8/4. At first it's played following a second gypsy type of scale:

d) C#-D-E-F-G-Ab-B.

Here the augmented second happens with Ab-B. The bass continues with A natural, thus it's getting a bit chromatic here. A lot more so when this theme gets harmonized. Then it's thus chromatic that you can't relate this version of the theme to a certain scale anymore.

The image shows a handwritten musical score for "Transylvania Boogie". It consists of three systems of music, each with a treble and bass clef staff.
 - The first system (bars 1-8) is marked with a box containing the number '1'. It is in 3/4 time and has a key signature of one sharp (F#). It features a melody with triplets and a bass line with a repeating pattern. Dynamics include *mf* and *mp*. A note in the bass line is marked "Keeps repeating as bar 3".
 - The second system (bars 8-16) is marked with a box containing the number '16'. It is in 4/4 time and has a key signature of one sharp (F#). The melody is more chromatic, with an augmented second interval (Ab-B). A note in the bass line is marked "(Bass continues as bar 3, A natural)".
 - The third system (bars 12-16) is marked with a box containing the number '12'. It is in 4/4 time and has a key signature of one sharp (F#). It continues the chromatic theme from the second system.

Transylvania Boogie (Ahead of their time), themes. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

I Guitar

Handwritten musical score for guitar, showing measures 1-4, 6-9, 10-13, 14, and 19. The score includes treble and bass staves with various musical notations such as triplets, slurs, and dynamic markings like 'mf' and 'mp'. Measure 19 shows a continuous eighth-note pattern.

Transylvania Boogie (Chunga's revenge), opening. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

On "Chunga's revenge" this song has become the album opener. It's mostly an improvised variation upon the "Ahead of their time" track. The transcription contains the opening bars. The general construction of this song on "Chunga's revenge" goes as:

- 0:00 First block beginning with a variations upon theme I from above in bars 1-4, also beginning with a A-Bb-C# movement. Next Zappa continues to improvise in this gypsy type key. In bar 9 the G gets altered to G# and in bar 11 the D becomes D#. By adding these chromatic ingredients, it's becoming an even more

exotic type of scale. In bar 13 Zappa turns over to A Mixolydian with bass and keyboard forming the I chord. It can also be interpreted as E Dorian because the weight of the bass line here lies on E. During most of the song it's A pedal. The D and G become natural again in bars 15 and 17. The F# from the A Mixolydian scale only first turns up at 0:41, not included in the transcription from above. Other than on "Ahead of their time" the band is playing in 4/4 for the larger part of the song.

- 1:57 Second block with theme II returning mostly identically.
- 2:05 Third block with theme III with extensions.
- 2:38 Fourth block with Zappa continuing to solo in A Mixolydian.
- 5:01 End.

2. Road ladies

"Road ladies" is a blues-based song with a solo in D Dorian. In the album liner notes Zappa calls all lyrics from "Chunga's revenge" a preview of the story from "200 Motels". Only "Road ladies" is directly related to the eventual "200 Motels" movie. Since not all scenes could be filmed, it's possible that other titles from "Chunga's revenge" are related to the movie script as well. It's certain that this applies to songs from the next "Fillmore East" album, but these didn't make it to the movie neither.

3. Twenty small cigars

"Twenty small cigars" stems from the preceding Hot rats sessions, dealt with in the corresponding section. It couldn't be included anymore in the "Hot rats" album, but the quality of this composition required an appearance elsewhere. Zappa decided not to record it anew with his new band, but to include the track as it was captured at first.

4. The Nancy and Mary music

This is a live recording from 1970. Touring with his newly formed band commenced in June, 1970, but most recordings with this band stem from 1971. The next section from this study deals with the few live recordings from 1970 that existed before 2016. There's a large number of live recording available by now, with the ZFT filling in many gaps (see the YCDTOSA section for an overview of live compilations). The 1970 gap was filled in in 2016 with "Road tapes, venue #3", with the two concerts at the Tyrone Guthrie theater in Minneapolis (July, 1970). The "Nancy and Mary music" is a larger collage of solos from two pieces, as played during these gigs. It contains two guitar solos by Zappa himself, in Eb en D Dorian. The correspondences are:

The Nancy and Mary music:

- 0:00-1:40 = 8:11-9:51 from Road tapes #3, disc I, track 12.
- 1:40-2:41 = 7:20-8:20 from disc II, track 12.
- 2:42-5:44 = 10:07-13:08 from disc I, track 12.
- 5:45-9:27 = 15:17-18:59 from idem.

This example contains most of the joint sax and guitar improvisation, that starts at 4:00. At bar 11 the sax stops and the guitar continues with a solo. The bass is playing around an Eb pedal during bars 1-10. Next the bass continues with a one-bar-vamp during the beginning of the solo. The example from above corresponds with 11:33-11:57 minutes from Road tapes #3, track I.12. The emphasis in these bars lies upon playing around Eb at first, followed by ticking the Ab as 16th notes. From bar 15 the solo continues in a standard manner.

9 *sva* →

p *mf*

p

p

p

p

svab.

12 *sva* → *pulsing irregularly*

pulsing irregularly

mp *p*

3

svab.

The Nancy and Mary music, 4:09 till 4:33. Transcription: KS (update Winter 2018; deposited at the I-depot, The Hague).

Overview of the two pieces these sections are taken from:

Road tapes #3, disc I, track 12: King Kong/Igor's boogie:

- 0:00 Theme two from the live performances of "King Kong" (see the Uncle Meat section of this study at "Uncle Rhebus").
- 0:24 Igor's boogie, phase one (see the Burnt weeny sandwich section).
- 1:38 Little guitar theme in Eb Dorian, as introduction for the solos.

Road tapes #3, I.12, 2:00 till 2:19. Transcription: KS (update Winter 2018; deposited at the I-depot, The Hague).

This guitar theme is a sequence of four bars in 4/4 in Eb Dorian. It gets repeated twice, the second time transposed up a fourth from Eb to Ab as starting point. This is where the transcription from above begins. Bars 1-4 are the second repetition of the sequence. Bars 5-7 contain the opening of the seguing guitar solo.

As it comes to compositions, the new Mothers started where the earlier Mothers had stopped. The sound of the band on "Road tapes #3", however, goes pretty differently. It's denser with George Duke on keyboards and especially Aynsley Dunbar on drums (photo to the right). Zappa described him as sounding like two drummers. Even so things would change again soon when the groupie opera got constructed during the 1970 fall tour. So, as more often in Zappa's career, "Chunga's revenge" and "Road tapes #3" are in their character and sound specific of only one year of recording and touring.

- 2:12 1st Guitar solo.
- 5:08 1st Sax solo.
- 7:40 Little interlude.
- 8:12 2nd Sax solo.
- 8:48 Drum solo.
- 10:24 Extravaganza by the band and audience participation.
- 11:24 Joint improvisation by the sax and guitar.
- 11:50 2nd Guitar solo in Eb Dorian.
- 13:09 Guitar chord progression, followed by a keyboard solo.
- 17:21 More extravaganza by the band and audience participation.
- 20:25 End.

Road tapes #3, disc II, track 12: The clap (Chunga's revenge):

- 0:00 Theme from Chunga's revenge (see below at track 7).
- 1:30 Keyboard solo.
- 3:28 Sax solo.
- 7:20 Guitar solo.
- 11:12 Reprise of the theme.
- 12:17 Applause with the "Mondellos" thanking the audience.
- 13:01 End.

It's all "Chunga's revenge" during the latter track and not "The clap" as on the album, but possibly this was the original working title.

5. Tell me you love me

"Tell me you love me" begins with a catching guitar riff in F sharp Dorian that by itself, I think, has some "hit potential", but maybe Zappa is using too many themes and variations in "Tell me you love me" to turn this song into a hit.

Handwritten musical notation for the beginning of "Tell me you love me". The score is written on two staves. The top staff is for guitar and the bottom for bass. The key signature is two sharps (F# and C#) and the time signature is 4/4. The notation includes a guitar riff, a bass line, and lyrics: "Tell me...", "Like I...", and "(Bass pauses)". Handwritten annotations include "Guitar Rumbassa ->", "Riff, two times solo", "Riff repeats", and "Bass plays parallel".

Handwritten musical score for the opening of "Tell me you love me". The score is on four staves. The top staff is a treble clef with a key signature of two sharps (F# and C#). The second staff is also a treble clef with the same key signature. The third staff is a bass clef with the same key signature. The fourth staff is a bass clef with the same key signature. The score is divided into measures. Handwritten annotations include "Like bar 5", "Like bar 6", "Pva bassa ->", "Tell me...", "Riff recommences", and "Three times". The bottom staff has "Pva bassa" written below it.

Tell me you love me, opening. Transcription: KS (2nd printed edition, reprint 2003).

Transcribed above is theme A. The structure of the total song goes as:

- 0:00 Theme A.
- 0:21 Side theme 1 ("I love you so hard now").
- 0:24 Side theme 2 ("Don't make me lose my pride").
- 0:30 Side theme 3 ("Grab a hold of you").
- 0:37 Theme A, variation 1.
- 0:53 Side theme 1 ("I want to feel it").
- 0:57 Side theme 2 ("Don't make me steal it").
- 1:03 Theme B.
- 1:16 Theme A.
- 1:37 Side theme 1 ("I love you so hard now").
- 1:40 Side theme 2 ("Burning with fire").
- 1:46 Side theme 3 ("Cause I gotta make love").
- 1:59 Instrumental outro, first played as intermezzo.
- 2:11 Theme A, variation 2.
- 2:23 Instrumental outro as final.
- 2:33 End

6. Would you go all the way?

All five songs with lyrics on "Chunga's revenge" can be called regular pop-songs. "Road ladies" is blues-like, "Tell me you love me" is rock 'n roll for its central lick. The other three on the album - "Would you go all the way?", "Rudy wants to buy yez a drink" and "Sharleena" - (also) belong to mainstream pop. "Sharleena" could be called a ballad as well. As it comes to their lyrics, all tracks on "Chunga's revenge" are for Zappa standards mild. The same goes for "Tears began to fall" on the next "Fillmore East" album, while everything else on that album goes into different directions.

7. Chunga's revenge

The bass riff from "Chunga's revenge" was used for soloing during jam sessions with the new band in the studio. The album has Ian Underwood on distorted electric alto sax and Zappa on guitar. One of the recordings was used for experimenting with four track surround audio, today much used in cinemas. Several other of such mixes were done in the seventies and the Zappa Family Trust (Dweezil in this case) released them as the "Quaudiophiliac" DVD of 2004. The "Chunga's basement" version of "Chunga's revenge" from "Quaudiophiliac" is included in the next section. Zappa referred to this technique with his line from "Camarillo Brillo": "she said her stereo was four way". The relatively short theme from "Chunga's revenge" was used in the eighties for introducing a longer guitar solo as present on "Buffalo" and "Trance-Fusion".

The image shows a handwritten musical score for the "Chunga's revenge" theme. It consists of two systems of staves. The first system has three staves: a bass staff (labeled "Pumbassa"), a guitar staff, and another bass staff. The second system has two staves: a guitar staff and a bass staff. The score includes bar numbers 1, 5, and 9. Handwritten annotations include "Repeats three times likewise", "Bass last time as below", "Bars theme keeps repeating", and "Bass plays parallel". The music is in 4/4 time and features a prominent bass line and guitar accompaniment.

Chunga's revenge, theme. Transcription: KS (update 2005, 3rd printed edition 2007).

With D being the lower opening note of both bar 1 and the riff, plus the central note of the main theme, the key is D Dorian. Bar 1 does the progression I-I-IV. Bar 5 incidentally begins with an F, bar 6 continues with the bass lick as it keeps being repeated. In bars 9-10 Zappa shortly lets some altered notes come passing by. In rock terms the progression here is Asus4-Dm-Asus4-Ab. It's followed by two bars stressing just the G. Next the riff returns and the soloing can start. To the left part of the Zappa photos by John Williams for the backside CD cover.

8. The clap

Zappa as a multi-instrumentalist comes out the best on "Zoot allures" from 1976, playing guitar, bass and keyboard. On "Twenty small cigars" he's playing the melody of this piece on harpsichord, next to the piano part by Ian Underwood. Zappa started his musical career as a drummer, but recordings with him sitting behind a standard drum-kit are rare. Only some of the tracks from the Cucamonga period feature

him as a drummer. Here he's using a large number of percussion instruments, next to the regular drum set. Playing percussion is something he occasionally did. Like the duet with Jimmy Carl Black on "YCDTOSA vol. V" or the "Roxy, the movie" DVD from 2015, where you can see him playing along with Ruth Underwood.

Zappa's interest in drumming and percussion took a new turn when he obtained the synclavier, where he had to type in drum parts himself again. His final work, "Dance me this", contains a number of passages from what he himself called "The rhythmic sadist's guide to drum patterns for the 21th century". It's a fascinating world, difficult to come to terms with. Melodic examples from this CD can be found at the end of this study.

9. Rudy wants to buy yez a drink

"Rudy wants to buy yez a drink" is a three-theme popsong with an instrumental interlude in it as bridge. Specifically this interlude has some vaudeville elements in it. The song was played live during the 1976 tour as included on the ZFT "Philly '76" double CD. Next are sections from both albums.

"Rudy wants to buy yez a drink", Chunga's revenge version (1970):

- 0:00 Instrumental opening progression in C, played twice: C-Am-Dm7-G. The transcription below starts with the repetition of this progression.
- 0:08 Theme I. The bass now changes the D from the previous progression to F, thus becoming C-A-F-G. The theme is sung twice, first as a single melody (bars 3-7), next with Flo and Eddie singing in parallels (bars 8-11). The first example below ends here.
- 0:30 Coda of theme I with the chords G-F-G-F-G, thus like ending in G Mixolydian. The rhythm goes a bit syncopic.
- 0:36 Theme II. The meter now changes to 12/8 in swing time (with no tempo change of a meter, thus a dotted quarter note being equal to a quarter note in the previous bar). This second theme is sung over a I-V alternation in F Lydian (or IV-I in C if you still want to interpret it as belonging to the central scale).
- 0:51 Theme III. This theme can be seen as a variation upon theme I, in C again, sung over the same bass line notes.
- 1:16 Instrumental interlude in C as presented in the second transcription below, played with some rubato. Its basis is a I-II alternation.
- 1:35 Theme I. The bass once plays C-A-D-G as at the beginning of the song and next returns to C-A-F-G.
- 1:56 Theme I once more.
- 2:11 Sung coda over the bass line G-F-E-D ("Now I go away.").
- 2:20 Closing chords with Zappa mingling C and A minor. The progression is C-G-C, followed by G#m7-5 - Am7. Thus its tail is VII-I in A minor with the major 7th (G#).
- 2:44 End.

1

Hi-, how you--

4:3

5

3

7

7

9

-- stars.

Brab.-----

Rudy wants to buy yez a drink (1970), opening. Transcription: KS (update 2013; deposited at the I-depot, The Hague).

Rudy wants to buy yez a drink (1970), section. Transcription: KS (update 2013; deposited at the I-depot, The Hague).

"Rudy wants to buy yez a drink", Philly '76 version:

- 0:00 Instrumental opening progression with just the bass line from above with drum beats, C-A-D-G.
- 0:08 Theme I. Other than in 1970 the bass doesn't change the D to F, the progression remains C-A-D-G throughout the song. Zappa first sings theme I alone. The bass is playing its notes in the manner of bar 1 in the transcription below with off-beat drumming.
- 0:23 Coda of theme I as described above (bars 3-4).
- 0:26 Theme IV. The meter now changes to 12/8 in swing time as above, but the sung theme goes quite different (bars 4-8). The transcription below contains the G Mixolydian tail from theme I, followed by a I-V alternation in F Lydian as in theme II as described above for the 1970 version. This is the section that seriously deviates from the 1970 version. In the other parts it's more the details that differ. The remainder of this version goes similar to my description of the 1970 version.

Handwritten musical score for "Rudy wants to buy yez a drink" (1976), section. The score is in 4/4 time and consists of two systems. The first system (labeled '1') has four staves: vocal line, guitar, bass, and drums. The vocal line includes lyrics "The union's--", "--right.", and "Uh huh--". The second system (labeled '2') has four staves: vocal line, guitar, bass, and drums. The score includes various musical notations such as notes, rests, and dynamic markings.

Rudy wants to buy yez a drink (1976), section. Transcription: KS (update 2013; deposited at the I-depot, The Hague).

- 0:40 Theme III.
- 1:00 Instrumental interlude.
- 1:16 Theme I.
- 1:40 Theme I once more with Bianca Odin and Ray White now singing along with Zappa.
- 1:53 Sung coda.
- 2:12 Closing chords.
- 2:20 End.

10. Sharleena

The following example is another mainstream piece, the ballad "Sharleena" in G Minor (bars 1-4) and Mixolydian (most other bars of the transcribed part). It first appeared on "Chunga's revenge" and was recorded again for "Them or us", where Zappa's son Dweezil contributed with a guitar solo.

The image displays a handwritten musical score for the sections of 'Sharleena'. It is organized into three systems, each featuring a vocal line and guitar accompaniment.

- System 1:**
 - Vocal:** The first staff shows the vocal line in treble clef with a key signature of one flat and a 4/4 time signature. The lyrics are "I'm cry- ing, ...". There are dynamic markings of *mf* and *p*.
 - Guitar:** The second and third staves show guitar accompaniment. The second staff has a *p* dynamic marking. The third staff is labeled "Pva bassa *mf*".
- System 2:**
 - Vocal:** The first staff continues the vocal line with the lyrics "Ten long...".
 - Guitar:** The second and third staves show guitar accompaniment. The third staff is labeled "Pva bassa".
- System 3:**
 - Vocal:** The first staff continues the vocal line with the lyrics "repeats".
 - Guitar:** The second and third staves show guitar accompaniment. The third staff is labeled "Pva bassa".

Sharleena, sections. Transcription: KS (3rd printed edition, 2007).

Transcribed here is the "Chunga's revenge" version. The opening theme moves over a downward going bass progression, the chords formed being subsequently Gm, F, Ebmaj7, Am7-5, Dm7 and G. The second transcribed theme below is made up of syncopic bars over a G pedal. "Sharleena" and "Tell me you love me" indicate the various ways Flo and Eddie can sing in parallels in Zappa's songs. You can see thirds, fourths, sixths and larger intervals going over an octave as a tenth in bar 5 of "Tell me you love me". Fifths turn up in the "Call any vegetable" transcription from the Just another band from L.A. section. In "Latex solar beef" (Fillmore East section) they are sometimes alternating each other, sometimes singing unisono. In the atonal part of "Billy the mountain" in this study they follow their own way. So the overall picture you get is that Zappa liked to employ the duet as really two singers.

QUAUDIOPHILIAC - FILLMORE EAST, 1970: ARCHIVE AND BOOTLEG RECORDINGS

After Zappa had disbanded the original Mothers of invention, he kept on performing live. At first on a lower scale with the so called Hot rats band. Next there was a short Mothers of invention tour. In the summer of 1970 he picked up his regular touring schedule again with a new line up of the band, that was performing in this set up for one and a half year. He only started recording live more seriously with an album in mind in June 1971 at the Fillmore East. The 1971 tour ran from May through December. For a long time there used to be a gap in the live recordings from the fall of 1969 through December 1970, the last month of the 1970 fall tour. Not only historically. The sources over this period were mostly indirect, in the sense that they weren't part of the official CD catalogue. This changed in 2016 with the release of "Road tapes, venue #3" (see the previous Chunga's revenge section for an example from this CD).

"Quaudiophilic" is an audio DVD with recordings with a four-channel stereo field, the oldest being "Chunga's basement" from 1970 (to the right the head of the reel, indicating the four fields). The indirect sources are bootleg recordings and documentaries, that indicate that there is more material worth releasing on a regular CD as well. This section is centered around the touring from 1970.

NOVEMBER 1969 - MARCH 1970

At the end of 1969 Zappa spent some three months on writing out the orchestral scores for "200 Motels". He still did a couple of live concerts with the musicians from the "Hot rats" sessions in or around L.A., without a touring schedule. Two of these shows got bootlegged.

Twinkle tits

The setlist contains a still unreleased composition called "Twinkle tits", being an interesting combination of known and unknown themes plus soloing. The title seems to stem from Zappa himself. In 2009 "Twinkle tits" became part of "Beat the boots III", including the version of this song that was previously known via the "Apocrypha" bootleg. This song is thus now legally available, though still only with an inferior bootleg sound quality. On another bootleg album he's said to introduce it with this title, calling it a waltz. If that's so then the term waltz can only refer to the "Holiday in Berlin" part in it. Or he had the first bar subdivided as 4 times 3/8. The general construction of this piece, as included in the "Apocrypha" bootleg, goes as:

- 0:00-0:13: a joyful riff of one bar in 12/8, played four times.
- 0:14-0:19: a second riff of two bars in 4/4 played once to introduce a guitar solo.

The opening riff is in E Mixolydian. The second riff and the soloing continue in E Dorian. The transcription is only a by approximation one because of the sound quality. It has Ian Underwood on keyboard, Zappa on guitar, Don Harris on electric violin and Max Bennett on bass.

- 0:19-1:20: first guitar solo.
- 1:21-1:34: the first riff played four times again.
- 1:34-1:42: a third more irregular riff played four times as well.
- 1:43-2:14: section from "Holiday in Berlin" from "Burnt weeny sandwich".
- 2:14-5:37: violin solo by Don Harris, Zappa plays rhythm guitar.
- 5:38-5:49: violin solo ends, the bass keeps vamping.
- 5:49-7:27: second guitar solo.
- 7:27-10:08: closing theme block, officially only known in a demo form from "Joe's damage" (spring 1972). There it's listed as "Another whole melodic section". See the Grand Wazoo section for a transcription.

Handwritten musical score for the first system of "Twinkle tits, opening". It consists of four staves. The first three staves are in treble clef, and the fourth is in bass clef. The key signature is two sharps (F# and C#). The time signature is 12/8. The first two measures are in 12/8, and the last measure is in 4/4. A handwritten note says "All repeat except: 4th beat" with an arrow pointing to a note in the second measure of the second staff. The word "Pvab." is written at the end of the fourth staff.

Handwritten musical score for the second system of "Twinkle tits, opening". It consists of four staves. The first three staves are in treble clef, and the fourth is in bass clef. The key signature is two sharps (F# and C#). The time signature is 4/4. The first two measures are in 4/4, and the last measure is in 2/4. A handwritten note says "Pvab." at the beginning of the fourth staff.

Handwritten musical score for the third system of "Twinkle tits, opening". It consists of four staves. The first three staves are in treble clef, and the fourth is in bass clef. The key signature is two sharps (F# and C#). The time signature is 4/4. The first two measures are in 4/4, and the last measure is in 2/4. A handwritten note says "Pvab." at the beginning of the fourth staff.

Twinkle tits, opening. Transcription: KS (by approximation, the bootleg sound quality is not good enough for a precise transcription).

Update 2011, deposited at the I-depot, The Hague.

Chunga's basement

The image shows a handwritten musical score for the section "Chunga's basement". It consists of several systems of staves, primarily in 4/4 time. The first system (measures 1-2) features a guitar part with a dynamic of *mp* and a bass part with a dynamic of *mf*. The guitar part includes triplets and a note with a wavy line. A handwritten instruction says "Bars 1-2 keep repeating". The second system (measures 3-4) is labeled "Guitar" and shows a melodic line with a dynamic of *mf* and a bass line. The third system (measures 5-6) features a guitar part with a dynamic of *p* and *mf*, and a bass part with a dynamic of *pp*. A handwritten instruction says "Bass restarts repeating bars 1-2". The fourth system (measures 7-8) shows a guitar part with a dynamic of *mf* and a bass part with a dynamic of *p*. A handwritten instruction says "(Bass and chord continue)". The fifth system (measures 9-10) shows a guitar part with a dynamic of *mf* and a bass part with a dynamic of *mf*. A handwritten instruction says "Sva-->". The score includes various musical notations such as triplets, slurs, and dynamic markings.

Chunga's basement, section. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

It's unknown why fine instrumentals as "Twinkle tits" and "Imaginary diseases" (1972) haven't been released by Zappa himself. Not even anything from the tours they were part of. It's imaginable that at

some point he did not think of these songs for inclusion in for instance the "YCDTOSA" series, but that he forgot about whole blocks of touring, that's highly unlikely. He did include studio material from this period on "Chunga's revenge" and "The lost episodes", whereas the ZFT would release "Chunga's basement" as the central piece on "Quaudiophilic".

The beginning of "Chunga's basement" is something you might call the lounge bar version of the more rock like "Chunga's revenge" (the slow tango type cover by the Gotan Project also has something of a lounge bar version). It skips the three guitar chords at the beginning; they turn up later in the song. The bass riff now gets divided over two bars, that are minor variants upon each other. The lead melody is played calmly and smoothly on keyboards, now in the form of a series of chords. The single E-D movement of the melody at the beginning has been replaced by a VII-I-IV chord progression in D Dorian for the descant in staff 1 (inclusion of the bass would extend the first chord to VII 11th). All notes are now arpeggio chords, played rapidly with the last note on the downbeat. The notation, via pick-up notes, looks a bit awkward for that reason. The sound of the keyboard is thick with some vibrato, so I'm not positive about all notes in the chords. Zappa enters with his solo in the same calm manner: he's playing unusually gentle and rhythmically easy here.

APRIL - MAY 1970

In December Zappa was offered the opportunity to have his newly written score premiered by the L.A. Philharmonic Orchestra, conducted by Zubin Mehta. To give this one time concert more body and publicity, he wanted his rock band to take part of it. He was able to regroup the former Mothers of Invention for a short reunion tour. The series of a dozen venues were meant to prepare for the concert with Mehta, to be held at the Pauley Pavilion. It turned out to be a major success, with this sports stadium filled to the full. To the right Zubin Mehta sitting with Zappa in front of the 200 Motels scores (from Changing Times: Los Angeles in Photographs, 1920-1990; photographer unknown). The following quotation can be found at <http://www.time.com/time/magazine/article/0,9171,878305,00.html>: ""Most rock groups could not do this sort of thing because they cannot read music," said Zubin Mehta confidently. "Frank Zappa, on the other hand, is one of the few rock musicians who knows my language." As conductor of the Los Angeles Philharmonic, Mehta is known not only for his willingness to step in where many Angelenos fear to tread but for his ability to get away with it musically."

Zappa wanted but couldn't record the concert, not even for private use. In order to do that he would have to pay the whole orchestra a union regulated fee, which was too expensive. When he wrote "Stick together" in the early eighties about union corruption, it was more than social criticism. It was personal resentment. So the only available documentation of this event is a bootleg version.

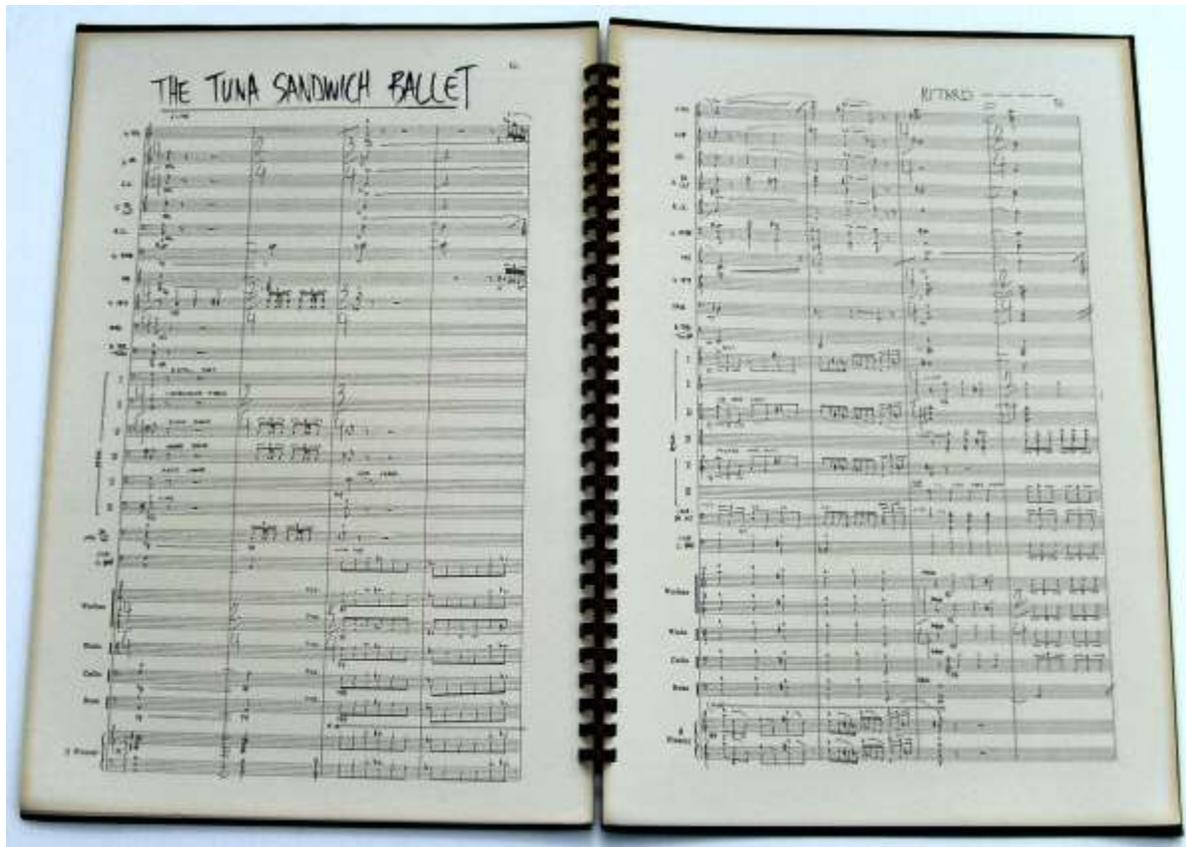
Dance of the just plain folks

The bootleg pressings include "Tuna sandwich", so next is a sample of the "Tuna sandwich" section of score. The first corresponding execution on album can be found on "200 Motels" as the opening of "Dance of the just plain folks". In the original score for "200 Motels" this section is called "Tuna sandwich ballet" (image below). The bars below contain changing meters, triplets and a tempo change. The main melody follows scales that keep changing.

Handwritten musical score for "Dance of the just plain folks, opening bars". The score is arranged in two systems. The first system includes staves for "Various", "Brass", "Strings", and "Perc.". The second system includes staves for a melodic line, a bass line, and a percussion line. The score features various time signatures (4/4, 2/4, 3/4), dynamic markings (mf, p, mp), articulation (accents, slurs), and performance instructions like "vab.", "pizz.", and "Ritard.". The percussion part uses "x" marks to denote hits.

Dance of the just plain folks, opening bars. Source: original score (reduced).

Note: some notes may be missing. I only have the small image of the original as presented in this section.



Along the way Zappa still wanted to finish his "Uncle meat" movie project. He was able to arrange a filming crew for a friend's price. He thought about interviewing the Mothers individually, so that it would be a documentary about the Mothers in the sixties. But when the members of the band got confronted with this unannounced project, they were reluctant to cooperate. So Zappa had to come up with something new, characterized by making something out of nothing, a method for which he praises John Cage on the "Lumpy Money" CD. Things were improvised on the spot and in the final edit nothing was done to conceal this. Don Preston took the major role as the monster Uncle Meat. Some of the acts and phrases used in it are thus bizarre that the result proves to be entertaining, despite of the extreme low budget.

JUNE - DECEMBER 1970

In June 1970 Zappa had assembled a new line up of the Mothers of Invention and picked up his regular tour schedule again. The fall tour lasted through December with venues in both Europe and the U.S., usually with a concert in Canada attached to it. Today there is official coverage, though still a bit scattered. At the start of the tour, two songs were radio-broadcasted in Holland. They are included in the "At the circus" bootleg from the "Beat the boot series". There's some live footage from 1970 included in the "The true story of 200 Motels" video as well as "Do you like me new car" and "Penis dimension". Zappa himself recorded the "Nancy and Mary music" live for "Chunga's revenge". The concert it was taken from, got released by the ZFT in 2016 as "Road tapes, venue #3". Jean-Luc Ponty included a live version of "King Kong" from this time on his album playing Zappa's music, though with a different one time only set up of the band.

Solos from Holiday in Berlin and Call any vegetable

Handwritten musical score for the first system. It consists of three staves. The top staff is a vocal line in treble clef with a key signature of two sharps (F# and C#) and a 6/4 time signature. It contains three measures of music, each starting with a triplet of eighth notes. The lyrics "inf La la la --" are written below the first measure. The middle staff is a piano accompaniment in treble clef, starting with a dynamic marking of *mp*. The bottom staff is a piano accompaniment in bass clef, starting with a dynamic marking of *ovab. mf*. The system concludes with a double bar line.

Handwritten musical score for the second system. It consists of three staves. The top staff is a vocal line in treble clef with the lyrics "-- la, hoi hoi --". The middle staff is a piano accompaniment in treble clef, with a dynamic marking of *mf*. The bottom staff is a piano accompaniment in bass clef, with a dynamic marking of *p*. A guitar part is indicated by the text "Guitar *ovab.* ->" with an arrow pointing to the right. The system concludes with a double bar line.

Handwritten musical score for the third system. It consists of three staves. The top staff is a piano accompaniment in treble clef, starting with a dynamic marking of *ovab. ->*. The middle staff is a piano accompaniment in treble clef, with a dynamic marking of *mf*. The bottom staff is a piano accompaniment in bass clef, with a dynamic marking of *mf*. The system concludes with a double bar line.

Holiday in Berlin solo (1970), section #1. Transcription: KS.
 Both sections: update 2010, deposited at the I-depot, The Hague.

Handwritten musical score for guitar, titled "Guitar" and marked with a circled 1. The score is in G major (two sharps) and 4/4 time. It consists of three systems of four staves each (treble, two inner, and bass clefs). The first system includes a circled 1 and dynamic markings like *mf* and *p*. The second system includes a circled 14 and dynamic markings like *p*, *mf*, *mp*, and *mf*. The third system includes a circled 8 and dynamic markings like *mp*, *mf*, and *mp*. The score features complex guitar techniques such as triplets, sixteenth-note runs, and slurs. Performance directions include *mf*, *p*, *mp*, *mf*, *8va*, and *8va.b*. The piece concludes with a circled 8.

Holiday in Berlin solo (1970), section #2. Transcription: KS.

Call any vegetable, Freaks and motherfu*#@%! bootleg, 3:53 till 4:33 (first 40 seconds of the guitar solo). Transcription: KS (2nd printed edition, 2001). Pitch notation as it sounds.

For long most material from this tour stemmed from three bootlegs from the "Beat the boots" series. Both "Tengo na minchia tanta" and "Freaks and motherfu*#@%!" were recorded at the Fillmore East, November 1970. They largely overlap. The first is of a far better sound quality, though the latter contains "Call any vegetable" uniquely. The following three guitar solo examples are taken from these two bootleg recordings. The "Holiday in Berlin" solo is listed as a separate track, "Inca roads/Easy meat", on "Tengo na minchia tanta". In the movie scores section I explained my preference for naming it a "Holiday in Berlin" solo (same D Lydian solo type). The one from "Call any vegetable" corresponds with the solo

from "Invocation & ritual dance of the young pumpkin" from the Absolutely free section. The B-C#-D-C# movement by the flute has been replaced by the chord progression I-IV-V-IV in E Dorian. The IV and V chords only contain the third, so the high notes from the chords follow the original flute tune. Rhythmically they do the same on beat - before beat alternation of the four notes/chords.

These three solo sections show how Zappa's style of soloing developed when you're comparing them to his later solos. The following remarks are applicable only in general:

- The rhythmical figures in his early solos are less complicated than in his later solos, that are full of irregular rhythmic groupings. The larger part of the bars above is fit for sight reading for a trained musician. This is something that can't be said of the solos that Steve Vai transcribed for the Guitar book. The "Orange county" solo section from the Roxy section is a good example of a readable earlier solo. The "Hot rats" solos, that Andy Aledort transcribed, confirm this picture.
 - The emotions in the melodic lines are less abstract than in his later solos. His style in the examples above is lyrical, almost romantic. Zappa created an image of himself that can't be associated with romanticism or love songs. But when you hear Bianca Odin singing "You didn't try to call me" on "Philly '76" or the above solo, you can see that things are never a rule for him.
 - In his earlier solos there's more room for the accompaniment to take part into the solo. The types of accompaniment have always remained the same, see the Guitar section for that matter, but in his earlier solos the accompaniment could respond to the solo more readily. For his later solos Zappa mostly wanted things as a reliable steady vamp. The band could vary around the vamp, but not interfere with his playing. Above in the second "Berlin" transcription you can see an example of the bass player responding to the solo. In bar 6 Zappa goes from low notes to fast high notes, starting with an F#. The bass player reacts to this by playing F# himself in bar 7, instead of going back to D, as the chord alternation would require. Here it works out well in accentuating the emotional density of bar 7.
- The "Vegetable" solo following upon it can only be found on the "Freaks and motherfu*#@%!" bootleg. Most of the bass part is about inaudible. I've included what I can hear as well as the keyboard part, for some of the solo's finesses lie in the cooperation between the guitar solo and the accompaniment. This solo appears to be more preconceived than usual and the construction of this particular section is quite unusual in Zappa's oeuvre.
- The drum part in his earlier solos is less elaborate than in his later solos. Specifically Jimmy Carl Black used to play just the beat, whereas Vinnie Colaiuta said that for Zappa you could hardly get over-excited drumming to his solos.

Who are the brain police? (1970)

The third bootleg from "Beat the boots", covering this tour, is "Disconnected synapses". It contains material from a concert at Paris, December 1970, that also got broadcast on French TV the next year. Below follows a variation upon "Who are the brain police?" to be found on this bootleg. The original song is included in the "Freak out!" album, with an example being presented in the corresponding section of this study. This 1970 version is re-using the lyrics, but the music goes that different that it almost has become a new song. Only in very general terms some similarities can be discerned in the music. Notable of this specific version are the irregular rhythm and large interval jumps in the bars with lyrics:

Handwritten musical score for the first system of "Who are the brain police?". The score is in 4/4 time with a key signature of one flat (Bb). It consists of three staves. The first staff (treble clef) starts with a circled '1' and contains a whole note chord in the first measure, followed by a repeat sign and a triplet of eighth notes in the second measure. The second staff (bass clef) contains three triplet markings over eighth notes in the first three measures, with the handwritten note "Four times" below. The third staff (bass clef) contains a continuous eighth-note line with the handwritten note "Plays parallel" and "Bvabassa" below. A circled '5' is placed above the first measure of the second system. The second system continues with chords in the first staff and eighth-note accompaniment in the second and third staves.

Handwritten musical score for the second system of "Who are the brain police?". It consists of two staves. The first staff (treble clef) contains a melodic line with triplet markings and a circled '9' above the first measure. The second staff (bass clef) contains a bass line with triplet markings and a circled '13' above the first measure. Handwritten notes include "What would... (Acc. plays along)" and "Others play along)". The system concludes with a circled '17' above the final measure and the word "Repeats" written at the end.

Who are the brain police? (1970), theme. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

- Bars 1-4: opening with stressing the C via two triplets (or sextuplets) in beats 1-3.
- Bars 5-8: a I-III-IV-I progression in C Dorian.
- Bars 9-12: main theme. In bar 9 you can hear a Bb going to F over an octave, thus a jump of a 12th. Bar 10 is a variation upon bar 9. On beat one the triplet rhythm is left for a split second for two 16th notes. The interval jump on beat three gets reduced to a 9th.
- Bars 13-17: second theme.

In the Carnegie Hall section another version of "Who are the brain police?" is included, played in a different manner a year later.

FILLMORE EAST - PLAYGROUND PSYCHOTICS: COMEDY SHOWS WITH FLO AND EDDIE

Zappa became impressed by Flo and Eddie's vocal abilities and gave them the central role for his next three albums. They went touring for two years as the eye catchers of the second line up of the Mothers of Invention. Recordings from these live performances are available on three CDs, "Fillmore East, June 1971", "Just another band from L.A." and a documentary like double CD "Playground psychotics". At this time the lyrics had for several episodes become the main dish with Flo and Eddie behaving like comedians. With these lyrics Zappa tried to entertain as well as shock his public, including disgusting sexual acts, a song about god on a sofa floating through the universe and a story about a mountain being drafted (the sofa episode can be found on "You can't do that on stage anymore vol. I"). They set the tone for his habit of describing sex in an unromantic pornographic way. The music during the dialogue parts of the live performances didn't have an important role, sometimes being no more than some vamping background accompaniment as in "Do you like my new car" or pausing a moment as occasionally done during "Billy the mountain". To the right the line-up of the 1971 band, playing at the Fillmore East. It's an outtake from the album cover, that is totally drawn/written in this manner.

FILLMORE EAST - JUNE, 1971

1. Little house I used to live in (1971)

The Fillmore East version of "Little house I used to live in" is much different from the preceding "Burnt weeny sandwich" rendition, included in this study as "The little house I used to live in (1970)". It has a newly composed introduction and the main theme is instrumentated differently, as well as containing variations and different harmonizations. The first version gets dealt with in the Burnt weeny sandwich section. The second example below is a transcription of themes 3-4 by W. Ludwig. On the "Burnt weeny sandwich" album bars 44-65 are played between 2:51 and 3:39, corresponding with 2:34 through 3:18 on "Fillmore East". To a degree the introduction on "Fillmore East" contains variations upon this material:

- 0:00 The downwards line from bars 44-45, starting with A, can also be recognized here in bar one. In this case with an additional B. The melody follows A-B-A-G-F#-E-D-C. Also here the tonic is A, though the melody is following the A Dorian scale. Bar two contains a set of triads.
- 0:07 Some improvisations, at first continuing in A minor. The meter switches from 6/4 to 4/4. The first transcription below contains the opening bars of the 1971 version till Zappa joins in on guitar in bar 7.
- 0:24 The opening line returns.
- 0:32 Some more improvisations.
- 0:46 The melody from bar 1 returns, much slower and in a different rhythm.
- 1:06 The downwards line some more, now played really fast.
- 1:08 Figures, specific for the "Fillmore East" version.
- 1:38 The main theme from "The little house I used to live in" starts.

1 Fast

8va b.

4

8va b.

The little house I used to live in (1971), 0:00-0:12. Transcription: KS (update Winter 2019, deposited at the I-depot, The Hague).

43

46

The little house I used to live in, themes 3-4 and the return to theme 2. Transcription: W. Ludwig.

2. The mud shark

On stage the groupie life became one of the themes, that gradually developed into something of a mini opera. The CD re-release improved the idea of a series of songs about the bizarre sex life of groupies, because the awkward way it was cut in half on the album could now be avoided. It's also better mixed. "The mud shark" sets off the opera with Zappa telling the audience about a video members of the Vanilla Fudge made about some unusual sexual behaviour. "Playground psychotics" contains "The mud shark interview" with Zappa asking a member of the hotel staff if they were aware things like this actually happened in their hotel (to the left part of the CD tracklist). Musically it's Zappa talking over a vamp. He would do that more often later on. Sometimes just regularly talking. Sometimes with a melody derived from enlarging the intervals of spoken language, or flattening sung melodies, depending how you look at it. Zappa called it meltdowns.

3-4. What kind of girl do you think we are? - Bwana Dik

"What kind of girl do you think we are?" is blues-based. It would re-appear years later on "Broadway the hard way", introduced by a couple of bars with striptease music. The opening of this version of "What kind of girl?" is included in the corresponding section.

"Bwana Dik" is one of Zappa's songs in the tradition of "Brown shoes don't make it", where he's using many themes in different tempi, different keys and different meters. Of the original songs on "Fillmore East", this one is the most divers. It's the opposite of the two vamp-based pieces, "Mud shark" and "Do you like me new car", where the lyrics stand central.

113 Tempo I, moderately slow

Abit faster

-- Clea-ra-sil--

114 Tempo II, faster

Girls from--

Asbassa

117

Asbarib

Asbarib

Asbarib

Asbarib

120 Abit slower (no keyboard notes)

Tempo III, much faster

Three times (alike)

Asbassa

Handwritten musical score for the "Bwana Dik" section. The score is in E major (two sharps) and 4/4 time. It is divided into two systems. The first system starts at bar 24 with the lyrics "My dick--". It features a vocal line, a guitar line with triplets, and a bass line. The second system starts at bar 29 with the tempo marking "A little slower" and "Tempo III". It includes a vocal line, a guitar line with chords, and a bass line. The score is marked with "As bar 25" and "As bar 26" for both systems.

Bwana Dik, section. Transcription: KS (update 2007, deposited at the I-depot, The Hague).

The transcribed section goes as:

- Bars 1-7: slow variation upon the "Duodenum" theme as played at the end (tempo I, 4/4), now with lyrics. See the Projects section for the original "Duodenum" version. Just as "Duodenum" it's in E Dorian and it ends chromatically.
- Bar 8: one pick-up bar in 2/4 for the next theme in tempo II, faster.
- Bars 9-19: second block in 4/4 using varying scales. It begins with the chord progression C-D-E-F-G in exact parallels (bars 9-13), thus all five chords are major 5th chords. Bars 14-15 repeat the tail of this progression. Bars 16-19 are in C Lydian.
- Bars 20-22: instrumental passage in 2/2 with a string of 32nd notes. The tempo becomes a bit slower. The keyboard part has exact pitches. Flo and Eddie follow it loosely without lyrics, because the human voice can't be precise in this tempo.
- Bar 23-24: two pick-up bars in 4/4 for the next theme in tempo III, much faster.
- Bars 25-30: third theme block in 4/4. The melody here is built over a I-VII alternation in F# minor/Dorian. In bars 29-30 the tempo is held back a little.

5-6. Latex solar beef - Willie the Pimp (1971)

Next are two examples in 4/4 where Zappa is using syncopes and triplets to make the rhythm within the metre more complicated. Whereas the main "Latex solar beef" theme has a regular rhythm, the accompanying figures are using syncopes on the fourth beat. In the first bar they set in a 16th before the beat and then divide the remaining time into two; in the second bar the "Mud shark" notes are played a 16th in front and after the beat. The "Latex solar beef" theme returns in a variation at the beginning of "Willy the Pimp". The first time "Latex solar beef" is played in B Dorian. The variation is in A Dorian. It's the same key as "Willy the Pimp" is in, thus making the transition go smoothly.

Latex solar beef, opening. Transcription: KS (update 2005, 3rd printed edition 2007).

Willie the pimp (1971), Latex solar beef theme. Transcription: KS (update 2005, 3rd printed edition 2007).

The slow main riff from "Willie the Pimp" (originally on "Hot rats") is in a normal rhythm. It neatly follows upon the "Latex solar beef" variation, introducing a solo in between the vocal parts. It's a fine solo

and the bootlegs from this period (see the Beat the boots section) indicate that there were more of them. See the Hot rats section for more about "Willie the Pimp".

The image shows handwritten musical notation for the song "Willy the Pimp". It consists of two systems of staves. The first system has three staves: the top staff is labeled "Guitar" and contains a melodic line with a key signature of one sharp (F#) and a 4/4 time signature; the middle staff is empty; the bottom staff is labeled "Bva bassa" and contains a bass line. A bracket labeled "5" spans the first two measures of the guitar staff. A handwritten note "(pauses 2nd time)" is written in the right margin of the first system. The second system has two staves: the top staff is labeled "Base repeats bars 5 and 6" and contains a series of chords with accents; the bottom staff is empty.

Willy the pimp (1971), theme. Transcription: KS (2nd printed edition, reprint 2003).

The bars above are in A Dorian, using the progression I-IV-III. "Willy the Pimp" is one of the two instances where Zappa changed his opinions on CD by leaving something completely out. "Willy the Pimp" now got a more normal ending and part II was removed. The other instance concerns the synthesizer ending of "I'm so cute" on "Sheik Yerbouti", which was shortened.

7. Do you like my new car? - The groupie routine

"Do you like my new car?" is the largest section with the lyrics standing central. In order not to interfere much with what's going on, the accompanying vamp is deliberately kept simple. It's basically a I-II alternation in F# major or Mixolydian (the E/E# that makes the difference is (largely) absent). Howard Kaylan plays the role of a groupie, while Mark Volman represents a popstar. The other people playing can be either other groupies or band members. Howard's text is reproduced in staff 2 of the first example below and staff 1 of the second example. Mark is staff 1 in the first example. The "Do you like my new car?" example is the section that includes an instrumental passage in F# Mixolydian. It's not specifically written for this song, but follows upon instances of when the text goes as "... dick is a monster...". You can

The groupie routine, opening bars. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

It shows that Flo and Eddie could keep changing the text of their parts while the general idea remained the same. Musically this version differs mostly from the "Do you like my new car?" version by letting the tempo of the vamp fluctuate. The opening bars in this case are in F# Dorian for bars 1-8, before the songs turns to the I-II alternation in F# major/Mixolydian, where it stays for the rest of the song. The metronome tempo of a quarter note can be:

- "Do you like my new car?": 110 (constantly).
- "The groupie routine" opening bars: 130.
- "The groupie routine" at its fastest: 240.
- "The groupie routine" at its slowest: 90.

As Zappa writes in the liner notes: "The 1971 band performed this routine every night, and every night it changed a little. This L.A. version has a few good variations in it."

8-9. Happy together - Lonesome electric turkey

"Happy together" is the big hit Flo and Eddie had as lead singers of The Turtles, a song written by Binner and Gordon. Groupies belonged to Zappa's favorite pastime, but the folklore from "Fillmore East" is just as much or even more based upon what happened to The Vanilla Fudge and the Turtles after they got their "bullet" hit. "Lonesome electric turkey" is a collage with an outtake from a keyboard encore and experimental vocal sections. On the album cover Don Preston gets credited for playing this solo and at one point you can hear a phrase from the "King Kong" theme, but being taken separate, you might ask if he shouldn't better have been co-credited as songwriter.

10-11. Peaches en regalia - Tears began to fall

The live recording of "Peaches en regalia" on "Fillmore East" follows the studio version from "Hot rats" without major adaptations. Its opening is included in the Hot rats section. The main difference is the vocal parts by Flo and Eddie without lyrics. "Tears began to fall" is both regarding its lyrics and music the only mainstream pop-song on this album. This song was also released as a single with "Junier Mintz boogie" on its b-side. The latter song is otherwise unreleased, being a solo over one of the "Latex solar beef" figures vamping.

A musical score for the song "Peaches en regalia" in 4/4 time. The score consists of seven staves. The top staff is the vocal line, starting with a treble clef and a key signature of one sharp (F#). The second staff is the guitar line, also in treble clef. The third staff is the bass line, in bass clef. The fourth staff is the keyboard line, in bass clef. The fifth staff is the piano line, in treble clef. The sixth staff is the saxophone line, in bass clef. The seventh staff is the drum line, in bass clef. The score includes various musical notations such as notes, rests, and articulation marks.

6

Musical score for measures 6-9. The score is written for six staves. The top staff is a vocal line with lyrics. The second staff is a treble clef accompaniment. The third and fourth staves are a piano accompaniment. The fifth staff is a bass clef accompaniment. The sixth staff is a bass clef accompaniment. The key signature is three sharps (F#, C#, G#). The time signature is 4/4. The music features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. There are several triplet markings (3) in the piano accompaniment.

10

Musical score for measures 10-13. The score is written for six staves. The top staff is a vocal line with lyrics. The second staff is a treble clef accompaniment. The third and fourth staves are a piano accompaniment. The fifth staff is a bass clef accompaniment. The sixth staff is a bass clef accompaniment. The key signature is three sharps (F#, C#, G#). The time signature is 4/4. The music features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. There are several triplet markings (3) in the piano accompaniment.

Tears began to fall, end. Transcription: KS (update Winter 2019, deposited at the I-depot, The Hague).

Tears began to fall: modulation by a transposition (T). The digits indicate the number of minor second steps. T9 is the overall transposition. The sung parts get repositioned. They follow the chords, but don't get transposed literally.

Its outlines go as:

- 0:00 Opening chord.
- 0:06 Chorus.
- 0:20 Verse.
- 0:27 Chorus.
- 0:33 Side-theme.
- 0:43 Chorus.
- 0:53 Side-theme.
- 0:57 Interlude along the chord progression from the chorus.
- 1:11 Verse.
- 1:24 Chorus with some guitar soloing.
- 1:52 Drum solo.
- 1:59 Side-theme, slowing down.
- 2:13 Chorus as outro.
- 2:45 End.

The transcription from above contains this outchorus. Bars 1, 5, 9 and 13 are solely using triplets, while the other bars are standard 4/4 with the quarter and eighth notes as time unit. This causes an effect of tempo changing with the bars with triplets sounding as if they go faster than the other bars. The notes example contains the theme played three times, where bar 1 can be seen as a pick-up bar. The chord progression is I-IV-VII-V in D Dorian with a chord per bar. The rhythm is straightforward 4/4 except for the syncopic transition the singers are making between bars 2-3 and 4-5. Next to Flo and Eddie you've also got Ian Underwood, Jim Pons and Bob Harris singing. I've used staves 1-4 to notate their melodies. As you can see they are most of the time not singing the same notes, something Zappa liked. He preferred chords over unisonity. In bar 10 the song modulates to B Dorian by transposing the bass and chord progression. The sung parts, however, don't get transposed literally with the same intervals, so this shape of the chorus can be seen as a variation (the chords get repositioned). The transcription ends at 2:35, after which the last 4 bars get repeated while fading out.

SOME TIME IN NEW YORK CITY

When Zappa was giving his three concerts at the Fillmore East in June, he was introduced to John Lennon and Yoko Ono, who had recently moved from London to New York. It was proposed that John and Yoko would do a guest appearance at the end of the late concert that day. Four pieces were prepared, a regular cover song called "Well" and three improvisations. The ensuing live jam session is more interesting because it's weird, than for its musical content. The first improvisation, named "Jamrag" by John and Yoko, consisted of John and Yoko stuff and Mothers routines, including Zappa's "King Kong" theme.

Scumbag

The image shows a handwritten musical score for the song "Scumbag". The score is written on ten staves, organized into two systems of five staves each. The top system includes a vocal line with lyrics "Scum-bag.", "Scum-bag", and "Scum-bag. Gen-na"; a guitar part with lyrics "Scum-bag." and "Scum-bag. Hey..."; a keyboard part; and a bass line. The bottom system includes a vocal line with the lyric "put..."; a guitar part with the lyric "Bra..."; a keyboard part with the lyric "Bra"; and a bass line. The notation includes various musical symbols such as notes, rests, and dynamic markings. The score is a transcription of a live performance.

Scumbag, 1:03 till 1:15 (Lennon, Ono, Kaylan, Zappa). Transcription: KS (update 2006, 3rd printed edition 2007).

Note: Guitars part only by approximation. It's both John Lennon and Zappa playing and not bright enough in the mix to get all details exactly in the picture.

The second one, "Scumbag", was another joint jam, this one around a vamp. The four bars vamp was made up of John chanting "scumbag" every two bars and a bass motif, played with several variations during this song. The vamp tends to dominate, but there's no use in listening to the "scumbag" line as if it were a lead melody, it simply won't change. The song gets better listenable when you devote most of your attention to what the other parts are doing. The score below might help; the "Scumbag" notes are only a minor part of what's going on in total. As composers of "Scumbag" Lennon, Ono, Kaylan and Zappa get jointly credited. Yoko is singing and squealing through all pieces and gets a chance to show what sounds her vocal chords can produce in the last improvisation, while John is feedbacking. It's titled "Au" by John and herself and "A small eternity with Yoko Ono" by Zappa.

The next day it was agreed upon that both would release a version of their own on their upcoming albums and Zappa gave John a copy of the tape. John and Yoko included this live jam as a bonus on their 1972 double album "Some time in New York City". It's a political pamphlet with so-called protest songs, half of them by John, half of them by Yoko. It sold poorly for Lennon standards. Whereas Zappa had parodied the Sergeant Pepper album sleeve of the Beatles, John now parodied Zappa's Fillmore East cover on his turn, writing all over it in red. Zappa may have liked this, but he wasn't amused by that he didn't get co-credited for "Jamrag". On the recent 2005 single CD issue Yoko appears to have skipped most of the jam, the double CD is the original version. For contractual reasons Zappa couldn't bring out his version that year. It only resurfaced in 1992 on "Playground psychotics". "Jamrag" got split into "Say please" and "Aaawk", leaving out the "King Kong" theme. The mix of Zappa's "Scumbag" is quite different from what John's producer Phil Spector did. The guitars aren't in the foreground no more and Howard Kaylan, who was almost mixed out, is back in business.

PLAYGROUND PSYCHOTICS

"Some time in New York City" is an album you can afford to make when you're already rich and famous, when there's no record company executive trying to obstruct things because it's less commercial. The same applies to Zappa's "Playground psychotics". To quote from the liner notes: "This album moves beyond mere rock 'n roll into the dangerous realm of social anthropology. It offers to younger musicians the chance to participate vicariously in the touring world of the early 1970's (way back when it was still fun to do)". And that is exactly what this double CD does. If you go along with Zappa's intentions it becomes enjoyable. Nearly half of the material is made up of takes from recorded conversations, while being on the road. The combination with music from three shows works well for building up a documentary and if things had been filmed as well it would have been nice to have on DVD.

Brixton still life

Musically there's little news. The jam with John Lennon from above is on it, some collages and several known pieces, that don't differ much from their original releases. Included are two solos, one on keyboard during "Billy the mountain" and a guitar solo by Zappa called "Brixton still life". It starts over a pedestrian beat on D, the key thus being D Mixolydian. After 50 seconds the bass player sets the meter to 4/4. It is from this point onwards that the transcribed section from below is taken.

Handwritten musical score for "Brixton still life" by Frank Zappa. The score is written on ten staves, with the top two staves labeled "Guitar" and "Bva". The music is in 4/4 time and features complex rhythmic patterns, including triplets and sixteenth notes. Dynamics range from *pp* to *mf*. Annotations include *mf*, *mp*, *pp*, "Etc.", "Repeats", "Keeps repeating", and "Bva". The score concludes with a final chord marked with a sharp sign.

Brixton still life, 0:50 till 1:20. Transcription: KS (update 2006, 3rd printed edition 2007).

"Playground psychotics" was constructed in 1992 when Zappa was severely ill. It must have taken quite some time going through the recorded conversations, but I have the impression that more could have been

made of the music if Zappa would have had more time. I don't know to what extent the concerts got recorded, but there are some things on the bootlegs from this period, that I personally would have welcomed on this CD. See the previous section for three examples. There's also a "Go to the club..." intro to the groupies opera on "Tengo na minchia tanta". The official version of this song can be found only on the movie version of "200 Motels" at about 1h:12.

Once upon a time - Sofa (1971) - Divan

The touring with Flo and Eddie ended abruptly in December 1971 with disasters for the band. At a Montreux gig in November the concert hall took fire and the touring equipment got destroyed. Worse, Zappa got thrown off a stage in London the next month, where he had to be taken to a hospital with both legs broken. Zappa was forced to recuperate at his home in L.A. Indirectly this meant the end of The Mothers of Invention in this set up.

The last piece Zappa had been working on for this specific band was a series of songs that fans gave the name "The sofa suite". In 2011 the ZFT released "Carnegie Hall", including this series of songs, giving it the name "Divan" after its closing track. Till then it could only be heard in its entirety on the "Fire!" bootleg with the Montreux concert on it. The suite is made up of "Once upon a time", "Sofa", "Stick it out" and "Divan". The first two songs are present on "You can't do that on stage anymore Vol. I". "Stick it out" became part of "Joe's garage" from 1979 in a different context, thus released eight years after it was written. "Divan" can be found on "Playground psychotics". Scattered around in this way the original story can't be detected anymore in Zappa's own releases. Parts of the spoken monologues are left out on these CDs, so even when you play these songs as a sequence, the intentions of the songtexts remain vague. Zappa had the text typed out as a play or script in combination with "Billy the mountain". A copy got auctioned at www.backstageauctions.com in 2009, from which the sample to the right is taken. The same as with the two previous plays (the groupie opera and "Billy the mountain"), "The sofa suite" is made up of sections where the lyrics stand central and parts where the music takes the lead. "Once upon a time" and "Divan" are the textual sections, both using a vamp. The "Once upon a time" vamp is in C in 12/8 time. In the transcription it's represented by staff 4 in bar 1. At this specific point the chorus is singing in German over the vamp ("Gib zu mir etwas fürs Bodenbelag unter diesem fätten fliessenden Sofa"). They are singing in three parts, forming a joint harmony progression. Most of the time however the band members are talking and speechwise singing. In bar 3 Zappa responds speechwise, translating the previous German sentence ("And of course, ladies and gentlemen, that means give me a bit of flooring under this fat floating sofa"). The "Divan" vamp is chromatic; it can't be assigned to a specific key. Its lyrics are partially in German and really weird. The chorus represents the vamp, whereas Zappa is speechwise singing. If I'm not mistaken, the transcribed section contains part of the following text block:

- Chorus: Laken von gebratenem Wasser.
(German for sheets of fried water.)
- FZ: Sheets of dry wall and ruffing.
- Chorus: Laken von dry wall und roofing.
- FZ: Sheets of large deprived Rhumba.
- Chorus: Laken von riesigen tief-gebadnem Rhumba.
(German for sheets of giant deeply-bathed Rhumba.)

12
 r3
 Gib zumir--
 12
 Etwas--
 12
 Gib zumir-- --So-fa, ah
 12
 Keeps repeating
 (plus Bvabassa parallel)
 *bx
 And of course-- --So-fa.
 hoow--
 (bass line continues)

Once upon a time, section. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

1

Musical score for system 1, measures 1-4. The system includes a vocal line with lyrics "Hey", a piano accompaniment with a sixteenth-note pattern, and a bass line. Dynamics include *mf* and *f*.

5

Musical score for system 2, measures 5-8. The system includes a vocal line with lyrics "Ich bin der..." and "(Pulsing)", piano accompaniment with triplets, and a bass line. Dynamics include *pp*.

10

Musical score for system 3, measures 9-12. The system includes a vocal line with lyrics "Ich bin das...", piano accompaniment with chords and triplets, and a bass line. Dynamics include *mf* and *mp*. The word "Repeats" is written in the piano part.

Handwritten musical score for three systems, each starting with a measure number in a box: 161, 221, and 271. The notation includes bass and treble clefs, various note values, rests, and dynamic markings such as *mf* and *vab.* (vibrato). The first system (161) features a complex texture with triplets and a *mf* marking. The second system (221) contains numerous triplets and sextuplets. The third system (271) shows a more sparse texture with a prominent treble clef line.

Sofa (1971), opening. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

Handwritten musical score for a section of "Divan". The score is written on ten staves, organized into two systems of five staves each. The top staff of each system is a grand staff (treble and bass clefs). The middle three staves are vocal parts with lyrics "mf La-ken--". The bottom staff is a bass line. The first system includes lyrics "mf Sheets of" and "mf La-ken--". The second system includes dynamics "mp" and "p" and "mf". The score features various musical notations including accidentals, slurs, and dynamic markings.

Divan, section. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

Of the various "sofa" executions the two of its first release on "One size fits all" (1974) are relatively homophonic (except for the example as included in the One size fits all section). The "In New York"

version contains the counterpoint figure as described in the Weasels ripped my flesh section of this study. This 1971 one allows much more freedom for the keyboard players. Bars 1-7 are specific for the original 1971 performance; they fit in well with the comedy character of the shows. Apart from being in 3/4 this one includes the archetype waltz steps in bars 9-11. Interesting is the figure the keyboards are playing via triplets in bars 24-26, a clear example of the more independent keyboard part in this version. The keyboard is here shortly playing in 4/4 against the 3/4 of the melody. "Sofa" begins in C (bars 1-13) and then modulates to G Mixolydian, simply by changing from C as key note to G as pedal note (these two keys use the same notes).

Other tracks from Playground psychotics

Regarding the musical sections "Playground psychotics" is a live compilation with several tracks being released before. The ones with the earlier versions included in this study are:

- "Sleeping in a jar": see the Zappa's teens section.
- "Sharleena": see the Chunga's revenge section.
- "Status back baby": see the Mystery disc-Projects section.
- "Concentration moon": see the We're only in it for the money section.
- Mom & dad: the score of this song is included in the Frank Zappa Songbook vol. I, pages 84-89.
- "Intro to Music for low budget orchestra": see the Studio tan section.
- "Billy the mountain": in this case a section from the "Playground psychotics" version is included in the Just another band from L.A. section.

The following block is quoted from <http://www.theturtles.com> in 2005, a little interview with Flo and Eddie reflecting upon their time with Frank from 1970 till 1993:

"What did you think of Frank Zappa? Whatever happened between you guys and Frank? Did you remain friends?"

Answer:

Howard: "Frank was an icon for a generation, and a true genius...also one of the greatest guitar players...." After the incident in London, England, Mark and Howard continued touring with the members of The Mothers. This was the first Flo & Eddie Band.

Howard: "Yes, we DID see Frank after the Rainbow Theatre accident...It took a while, but Frank sat in with us in NYC at the Bottom Line one year, and we sat in with his band in Detroit the year after...."

"Toward the end, we became good friends again, going up to his famous studio and watching our old concert footage; laughing about the good old days. He knew that the clock was ticking but he kept chain-smoking, coffee drinking and eating anchovy pizza...The man was one of the few real geniuses I've ever had the honour to work with."

In addition to a couple of live onstage guest appearances, in 1987 Mark and Howard reunited with Frank....

Howard: "Frank's original intention was to get the "Filmore East" band back together to do one huge world tour...."

"So we got together in L.A. at a rehearsal hall for two days...."

Unfortunately, it was not to be. Apparently there are tapes of the rehearsals in existence somewhere.

When asked which of his bands were Frank's favourites, Gail Zappa was quoted in an interview as saying he liked all of them, but mentioned Mark, Howard and Aynsley Dunbar as particular favourite members for their talent and senses of humour."

JUST ANOTHER BAND FROM L.A. - CARNEGIE HALL - FINER MOMENTS: SEQUENCES AND TEMPO CHANGES

After the forced ending of the 1971 tour, Zappa first released an album with material from the last fall leg of this tour as "Just another band from L.A.". This section is among others about sequences with some examples from 1971, next to listing others. A sequence can mean any following order of notes or, more specifically in the classical sense, a melody with one or more motifs that get repeated starting on a different pitch. Zappa's biggest sequence in the classical sense is the keyboard interlude from "Easy meat" from "Tinsel town rebellion", called classical by Zappa himself in the liner notes. That one is diatonic. Some examples of atonal sequences are included in this section.

JUST ANOTHER BAND FROM L.A.

1. Billy the mountain - Number 7

All of side A is taken up by "Billy the mountain", lasting almost 25 minutes. Live versions could even be longer, as the "Carnegie hall" issue by the ZFT shows. To the right an outtake from the album cover with a hamburger by Sherm Thomson, and band members in a car drawn over it by Cal Schenkel. Of Zappa himself you can see his broken leg sticking out.

"Billy the mountain" from "Playground Psychotics/Just another band from L.A." is one of the lyrically oriented live pieces. It's a normal tonal piece, except for one occasion where it shifts into some atonal bars. After a clarinet introduction, Flo and Eddie sing the opening theme, beginning in D flat Lydian (the bass pedal note is D flat at the opening). The transcribed section at the part "(Postcar)-dy mountain ..." till "... Rosamon" has become atonal. As in the "Penis dimension" sequence from below, for the higher descant voice the intervals are chromatically repeated from "-dy" to "love-". The interval movement is 1-3 (as the number of minor seconds between the notes), being C#-C-A, B-Bb-G and A-Ab-F. It's transcribed from "Playground psychotics" with Howard Kaylan singing the higher voice along with the clarinet and Mark Volman singing sometimes the same notes and sometimes the lower notes.

A handwritten musical score for the song "Billy the Mountain". The score is written on two staves of five-line music paper. The first staff begins with a treble clef, a 3/4 time signature, and a key signature of one flat (B-flat). The melody consists of quarter and eighth notes. Below the first staff, the lyrics "A re-gu-lar pic-tu-rous post-car-dy moun-tain re-si-ding be-" are written in a cursive hand. The second staff continues the melody, also in treble clef and 3/4 time. Below the second staff, the lyrics "tween Love-Ly Ro-sa-mon and Go-ran —. With his stun-ning wife E-thel a tree" are written. The notation includes various accidentals (sharps, flats, naturals) and rests.

Billy the Mountain, Playground Psychotics, 0:14 till 0:45 (main melody). Transcription: KS (1st printed edition, 2000).



Number 7, opening. Source: original score.

Zappa wrote several pieces of chamber music that only got general titles as "Exercise #4", "Numbers 6 and 7" and "Opus 5", the latter being part of the "Mount St. Mary" program from 1963. They could get incorporated in songs with regular titles, while others are possibly still resting in Zappa's archive. "Numbers 6 and 7" are (or were) on the Barfko Swill list with available scores at www.zappa.com. Both were premiered after Zappa's death. "Number 6" can be found on a CD by "Prophetic attitude". A piano reduction of the opening of "Number 7" is present in an article in the Dutch magazine "Mens en melodie" by Barend Tromp (June 2000). It's played on the "Music by Frank Zappa" CD by the "Omnibus Wind Ensemble" (1995). All tracks on this CD are arrangements that sometimes follow the notes of the original quite literally, at other instances it's done with an amount of liberty. Because of that I can't tell for sure what the composition as a whole was intended to be by Zappa himself. The lead melody in staff 1 is a sequence, following the diatonic scale descendingly. For that reason it's included in this section (it's unknown when Zappa wrote this piece). It's made up of cells of two and three notes, thus avoiding the movement to become too much linear and creating odd meters. Of the other three voices the bass sounds as a counterpoint line and the two middle voices create harmonies with the main melody. They are not in the diatonic scale of staff 1, so the composition as a whole becomes atonal. It's the combination of the bass line and these harmonies that make this piece an interesting miniature. The original instrumentation is for wind quintet, thus one of the four parts gets doubled. The rhythm is using the eighth note as a time unit all through and the piece is played slowly. For Zappa standards that's rather static and uncharacteristic of his music. The set-up is also such that it could be played on a church organ by one person, with some notes transposed an octave. Above to the left an outtake of a photo by LFI with the Mothers standing in front of the Albert Hall (1971). They played in this hall in 1968 (with "Loui Loui" appearing on "Uncle meat"), but got banned in 1971.

Very roughly "Billy the mountain" can be subdivided into five blocks, with the times from "Just another band from L.A." being:

- 0:00 Block I: opening as described/transcribed above.
- 0:43 Block II: Billy the mountain vamp (0:43-0:46) and central theme in Ab (3:05-3:42), followed by and alternated with a number of side themes and narrative episodes.
- 11:16 Block III: Studebacher Hoch part.
- Not included is Block IV, solos by band members plus some reprises from block III. These can be heard

on the "Playground psychotics" version and the "Carnegie Hall" edition by the ZFT. On both occasions they're accompanied by a I-II alternation in C Lydian.

- 21:20 Block V: Finale.

- 24:46 End.

The image shows two systems of handwritten musical notation. The first system is marked with a circled '1' and contains four staves. The top staff is a guitar line with a '37' fingering and a '7' fret marker. The second and third staves are vocal lines, with the second staff annotated with 'Repeats' and the third with 'Studenbacher'. The bottom staff is a bass line. The second system is marked with a circled '2' and also contains four staves. The top staff is a vocal line with 'Repeats' written below it. The second staff is a guitar line. The third staff is a vocal line with 'Fly to New York' written below it. The bottom staff is a bass line. The music is in 4/4 time and the key signature is C Lydian (one sharp).

Handwritten musical score for "Billy the Mountain". The score is written on four staves. The first staff is an instrumental bar in 4/4 and G Mixolydian. The second and third staves show vocal lines for Flo and Eddie, with lyrics "He could be a drummer of rock or a Lesbian queen --". The bottom staff is a bass line. The score includes various musical notations such as notes, rests, and dynamic markings.

Billy the Mountain, 20:02-20:29. Transcription: KS (update Summer 2017, deposited at the I-depot, The Hague).

The narrative parts tend to dominate the piece, making it a mixture of literature and music. There are some sections, where the music stands central for a longer period. The example above stems from the section from 19:39 through 21:20 with a number of themes. The transcribed bars comprehend:

- bar 1: instrumental bar in 4/4 and G Mixolydian.
- bars 2-5: four times a bar in D with the lyrics following the same rhythm. In this case Flo and Eddie are mostly singing the same notes (the dissonant F#-G combination being a notable exception). See above and below for how they can differentiate.
- bars 6-9: two times a phrase of two bars in D Mixolydian. The harmonies are a mixture of I and VII, as triads and sus-chords.
- bar 10: a pattern breaking bar in 13/8. Here the rhythm follows the syllables of the lyrics with exact eighth notes. This is between musical and speech-wise singing. Musically the lyrics are written in a manner to be able to be adapted to the rhythm of a song. Zappa could also compose speech-wise, where the music adapts itself to the rhythm of spoken language. This is a third approach he applied only a few times. The text determines the 13/8 meter, but the syllables of the words are pronounced as eighth notes in a rather mechanical manner. It starts as if still continuing in D Mixolydian, but ends chromatically.
- bar 11: return to the phrase from bars 6-9.

SEQUENCES

Sequences in the classical sense can turn up in a number of shapes. Below I'm listing a series of examples from this study, subdivided into four categories. Some instances contain only one return of a motif ("Central scrutinizer"), others can include a series ("Five-five-FIVE"). Because of the shape of a diatonic scale, repetitions of a motif on a different pitch can easily lead to the need of a minor change if you want to stay within the same scale. A minor second can become a major second or the other way round. Literal transpositions of the intervals can lead to a more chromatic or multi-scale oriented situation.

- 1) Returning motifs within one scale with minor variations.
 - "Son of Suzy Creamcheese" (9/8 bar with three major triads).

- "Jelly roll gum drop", theme two.
 - "Prelude to King Kong", bars 10-16.
 - "King Kong", bars 1-4.
 - "Road tapes #3", track I.12 example, bars 1-3.
 - "Magic fingers", theme one, phrase two.
 - "The idiot bastard son", theme one, bars 4-12.
 - "San Ber'dino" example, bars 12-19.
- 2) Returning motifs through varying scales with minor variations.
- Theme one from "How could I be such a fool".
 - "Brown shoes don't make it", second example, bars 4-10.
 - Theme C from "What's the ugliest part of your body?"
 - "The grand wazoo" example, bars 29-36.
- 3) Returning motifs where the intervals are repeated literally (transpositions).
- "Aybe sea", bars 9-12.
 - "Peaches en regalia", theme three.
 - "Can't afford no shoes", chord pattern of the chorus.
 - "Lemme take you to the beach", theme one, bars 1-8.
 - "RDNZL", first example.
 - "Zoot allures", central theme, bars 22-32.
 - "Central scrutinizer" example, bars 5-7.
 - "Why does it hurt when I pee?" example, bars 9-11.
 - "Five-five-FIVE" example.
 - "N-lite" example, bar 8.
- 4) Returning motifs in an atonal environment.
- "The rejected Mexican pope leaves the stage", bars 29-32.
 - "Penis dimension" (see below).
 - "Billy the mountain" (see above).
 - "Dupree's paradise" (1974), main theme, bars 1-4.
 - "Drowning witch", fifth example.

W. Ludwig lists his examples of sequences on pages 234-235 of his study. You can also find series of variations upon the movement of a motif in Zappa's music. Not sequences in the strict classical sense, but in the more general meaning of a series of similar items. To mention three examples from the Them or us section of this study:

- "Marque-Son's chicken" example, bars 7-18.
- "Sinister footwear I", second example.
- "Sinister footwear II", first example.

2. Call any vegetable

After just pulsing the Em chord (no 3rd) during bars 1-2, "Call any vegetable" continues with a fast string of 16th and 8th notes from bar 3 onwards, that always strikes me as Zappa, not because he's using them that often, but because I seldom hear them with other artists. The movement from beat 1 to 2 is syncopic, the remainder is on beat. This song first appeared on "Absolutely free". The version of the opening theme, that's transcribed here, is from "Just another band from L.A.". This one has a phrase in normal rock time, beginning in bar 18, not being present on "Absolutely free", like there are many version differences between these two CDs. Bars 1-17 from the transcription are in E minor or E Dorian (there's no C or C# in this part to confirm which one it is). From bar 18 onwards in the transcription the song is in F# Dorian.

Handwritten musical score for the first system of "Call any vegetable". It features three staves: a vocal line with lyrics "Hey, Woow." and "Call a-ny..", a guitar line with a rhythmic accompaniment, and a bass line. The key signature is one sharp (F#) and the time signature is 4/4. Bar numbers 1 and 7 are indicated.

Handwritten musical score for the second system of "Call any vegetable". It features three staves: a vocal line with lyrics "(Acc. figure continues)", a guitar line with a rhythmic accompaniment, and a bass line. The key signature is one sharp (F#) and the time signature is 4/4. Bar numbers 10 and 14 are indicated.

Handwritten musical score for the third system of "Call any vegetable". It features three staves: a vocal line with lyrics "(Acc. figure stops)", a guitar line with a rhythmic accompaniment, and a bass line. The key signature is two sharps (F# and C#) and the time signature is 4/4. Bar numbers 18 and 24 are indicated.

Call any vegetable (1971), opening. Transcription: KS (update 2005, 3rd printed edition 2007; some details in bars 19-24 renewed in 2012).

"She painted up her face" is one of the themes Flo and Eddie are singing on "200 Motels". It's the opposite of the fast string from the "Call any vegetable", going slowly with notes lasting over bars. See the next "200 Motels" section for its opening.

1 Guitar Fast

8va b.

5

8va b.

9

8va b.

Call any vegetable (1971), solo. Transcription: KS (update fall 2019, deposited at the I-depot, The Hague).

This last example is the opening of the solo, played between 3:40 and 3:55. There are already two solo excerpts from "Call any vegetable" present in this study. One from 1970 (see the Quaudiophilic section) and one from 1967, when it carried a title of its own (Invocation & ritual dance of the young pumpkin from the Absolutely free section). Both are in E Dorian. The inclusion of this one is a consequence of my discussion with Brett Clement with Brett calling it A minor pentatonic. At first I thought the A was a writing error for E. Zappa was forever busy re-ordering and changing his material, and this is another example. Brett is correct in saying that the tonic in the case is A, that is when you're listening to the "Just another band from L.A." version. And it has a different type of vamp too. It can be seen as a pedal substitution for E, because E Dorian has become A Mixolydian at first. The solo begins with playing around the A7 chord. During bars 1-8 it can be attributed to A Mixolydian, the only diatonic scale that supports the dominant 7th upon its tonic. A Dorian element is already present with a C natural in the bass vamp. Dorian is taking over from bar 9 onwards, where the regular melodic soloing begins. From that point onwards the chord upon A has become Am or Am7.

Jeff Simmons played bass during the 1970 tour. On official albums he can only be heard on the "Chunga's

revenge" sections from this tour. All other live albums with this band were recorded in 1971 with Jim Pons playing bass. He replaced Jeff after his sudden departure during the filming of "200 Motels".

3. Eddie are you kidding?

Between two new renditions of earlier Zappa songs, "Eddie are you kidding?" and "Magdalena" are two songs of the "comedy act" type with Flo and Eddie standing central. They claim to have contributed to these songs, apparently acknowledged by the ZFT by co-crediting Howard Kaylan for "Magdalena" on their "Carnegie Hall" release. To the right Zappa and Kaylan in the studio (outtake of a photo by Henry Diltz/Corbis as reproduced in the Barry Miles biography). "Eddie are you kidding?" is innocent humor, making fun of double-knit clothing.

4. Magdalena

"Magdalena" is a pretty different form of humor, somewhere between entertaining and shocking an audience.

This title is one of the many Zappa songs that include tempo changes (see the meters table in the Roxy section for an overview of examples of songs with tempo changes). In this case these changes are essential. If you would leave them out it would spoil the song. In the transcribed section bar 19 offers a variation upon bar 11 via a tempo change. The rhythm is also different, but if you would skip the tempo change, the variation effect would mostly be gone. In the second half of the song a "walk, walk, walk" vamp starts. The vamp gets accelerated till the end of the piece, emphasizing the sick horniness as expressed in the lyrics. At the end a siren enters the scene, before everything calms down for the introductory rock bars for "Dog breath". The transcribed section contains the three themes of the first half of the song.

Bars 1-10: Theme I. The opening bars of "Magdalena" are in the vaudeville parody style with a fourth movement in the bass, often used in various forms of folk music and country and western music. It goes similar to the opening of "Lonesome cowboy Burt" on "200 Motels". See also the Broadway the hard way section for this topic. Flo and Eddie are singing a string of notes, about as fast as possible if you still want to be able to distinguish the words of the lyrics. The song begins in standard 4/4. The key is D Mixolydian, modulating to A Mixolydian from bar 9 onwards.

Bars 11-22: Theme II. This theme of four bars is sung three times. First two times in 6/4 with a regular repetition. The third instance offers a variation via a tempo change, as mentioned, for the first two bars of the theme. Then the other two bars are sung in 12/8 in the original tempo.

Bars 23-29: Theme III. Again in 6/4, now in a slower tempo.

[19] Tempo II, faster

Asbar 11 Asbar 11 As bar 12

Bars 11-14 Repeat Alike

Tempo as in bar 11 Tempo III, slower

Repeats Repeats

(A hee-)

Magdalena, opening. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

5. Dog breath (1971)

The different appearances of "Dog breath (1969-1993)" and the "Dog breath variations" are getting amply dealt with in the Uncle Meat section. The Ludwig study (see the references) contains an example, specifically transcribed from "Just another band from L.A.". I've included some bars below. My own transcriptions concern four other renditions of these titles.

Handwritten musical score for "Dog breath (1971)". The score is in 4/4 time with a key signature of one sharp (F#). It consists of five staves. The top staff is the vocal line with lyrics: "Fuz — zy — dice —, bon-yos in the back, my — ship — of —". The second staff is the guitar line, showing chords and melodic lines. The third staff shows guitar chords. The fourth staff is the bass line. The fifth staff is the bass line, labeled "bass." at the bottom left.

Handwritten musical score for "Dog breath (1971)". The score is in 4/4 time with a key signature of one sharp (F#). It consists of five staves. The top staff is the vocal line with lyrics: "Love —, is — rea-dy — to at-tack —." and "ship — of — Love —". The second staff is the guitar line, showing chords and melodic lines. The third staff shows guitar chords. The fourth staff is the bass line. The fifth staff is the bass line, labeled "bass." at the bottom left.

Dog breath, 1971, section. Transcription: W. Ludwig (staves 1-2)/KS (chords and bass).

These bars deal with the divergence between the vocal parts Flo and Eddie are singing. The higher line sings the full text. The second lower line sings slower, in a different rhythm, with only the first words of the two sentences involved. It uses different pitches as well, offering harmony notes for the first line. The accompaniment is a D-Em alternation. By itself one would say this (second) theme is in D, but in a wider context it can also be seen as step V of G Lydian or IV of A Mixolydian. See the Uncle Meat section for more about this topic. In this version the accent lies on G Lydian. It has a coda of its own in F# Dorian, including a guitar solo over a chromatically descending bass movement (F#-F natural-E-D#). This coda starts at 1:29.

Penis dimension

The total composition "Penis dimension" lasts over 10 minutes including the following sections:

- a) Opening by the orchestra and choir. A piano reduction can be found in the Frank Zappa songbook vol. I, pages 39-43. Next is the opening from this piece, taken over from the Songbook. Bars 10-14 form a sequence with the intervals of the sung melody being repeated in a chromatic set up. Thus comparable to the first "Billy the mountain" example from above. For that reason "Penis dimension" is included in this section about sequences. To the left a screenshot from the torch procession scene from "200 Motels". For this movie Zappa used several forms of collage techniques. In this case you can see Mark Volman's face projected over a member from the orchestra with the score in front of him or her. Mark is reciting the "public announcement" from "Penis dimension".
- b) Spoken text over a vamp. The vamp is presented at the bottom of page 42 of the songbook, while the text is presented on page 43 as a "Public service announcement to be read over Penis dimension vamp ending".
- c) Section with material from "Bwana Dik", as first released on the "Fillmore East" album from 1971.
- d) Dialogues about the sound of the word "penis", alternated with smaller musical episodes.
- e) Coda/End.

"Penis dimension" premiered on the "200 Motels" album from 1971, including blocks a) and b). Next Zappa re-arranged this piece for his 1972 jazz band, with a performance being included in the "Wazoo" release by the ZFT. For this occasion a little solo could be played over the vamp. The "The suites" version of "Penis dimension" includes sections a)-d). "The suites" suggests being a full orchestra version, so I felt much surprised encountering a coda of this piece on internet in 2018 at Heritage Auctions. A handwritten "Penis dimension" score of 34 pages with 196 bars was to be auctioned. Zappa's handwriting can be readily recognized, so there's no doubt about its genuineness.

Zappa originally intended this piece to end with what he liked to call a frenzy, a deliberate chaotic ambience, but all directed. In this case a frenzy by the full orchestra and choir. It involves large clustered chords and erratic melodic lines, sometimes parallel, but mostly as counterpoint lines. All is atonal. Horizontally the rhythmical relationships are difficult: 4/4 with an 11- and 10-tuplet, followed by 11/16 and normal 4/4. Vertically most parts follow the same rhythm, but also here divergence exists, like the triplets and quintuplets in bar 190. The example above includes bars 189-196, the sample pages from the end that were shown at the site of the auctioneer. So I can't tell what the total coda would be like. Maybe even more got skipped or changed that we don't know of yet.

The reason why this coda got skipped from all actual executions may be clear. It's not really fit for a human performance. As you can see in various other sections from the original "200 Motels" score (next section), Zappa composed "200 Motels" supposing an ideal situation with unlimited rehearsal time. Theoretically all can be performed, but for practical reasons various parts got either adapted on the spot or skipped altogether. Also a midi editor can't handle the above well, it's only an approximation. I can't tell what the tempo should be. The piece begins with the metronome tempo of a fourth note being 84, but when you magnify the sample of page 6 from the score (reproduced in the "200 Motels" booklet), you can see a tempo change to first 116 (faster) and next 58 (half speed).

The image displays three systems of handwritten musical notation for the piece "Penis dimension". Each system includes a vocal line (treble clef) and a piano accompaniment (grand staff with treble and bass clefs). The time signature is 3/4.

- System 1 (Measures 11-13):** The vocal line begins with the lyrics "Pe-nis di-men-sion," followed by a rest and then "men-sion." The piano accompaniment features a steady bass line and chords in the right hand. A first ending bracket labeled "As bar 1" spans measures 12 and 13. A second ending bracket labeled "Two times" spans measures 13 and 14.
- System 2 (Measures 16-18):** The vocal line continues with "Pe-nis di-men-sion is wor-ry-ing me." followed by a rest and then "I can't hard-ly". The piano accompaniment continues with similar harmonic support.
- System 3 (Measures 17-20):** The vocal line concludes with "sleep-at-night'cause of pe-nis di-men-sion." The piano accompaniment features a more active right hand with triplets and sustained chords.

Penis dimension, opening. Source: Songbook (theme and piano reduction of the orchestra and the choir part), the full score can be ordered at Barfko Swill.

Handwritten musical score on page 370, featuring multiple staves for woodwinds, strings, and percussion. The score includes dynamic markings such as *pp*, *mf*, *f*, *ff*, *sfz*, and *sf*, along with performance instructions like *ALL STRINGS DIMINUENDO* and *CH*. The page is numbered 189 at the top left and 370 at the top right. The score is divided into measures, with some measures containing handwritten annotations and markings.

189

370

190

191

WOODWINDS

CLARINET

FLUTE

OBOE

BASSOON

TRUMPET

TROMBONE

PERCUSSION

DRUMS

TYMPAN

CH

ALL STRINGS DIMINUENDO

Handwritten musical score on aged paper, featuring multiple staves and sections. The score is divided into measures 192, 193, 194, 195, and 196. The notation includes various musical symbols, clefs, and dynamic markings.

Key sections and markings include:

- Measures 192-193:** Initial musical notation with various notes and rests.
- Measure 194:** A section with a large handwritten bracket and the text "The First Two".
- Measure 195:** Continuation of the musical notation.
- Measure 196:** Ends with the instruction "HAND WITH PIANOS, RING OFF LEAD".
- Violin I and II:** Staves labeled "Violin I" and "Violin II" with musical notation.
- Viola:** A staff labeled "Viola" with musical notation.
- Cello and Double Bass:** Staves labeled "Cello" and "Double Bass" with musical notation.
- Woodwinds:** Staves for "Flute", "Clarinet", and "Bassoon" with musical notation.
- Strings:** Staves for "Violin I", "Violin II", "Viola", "Cello", and "Double Bass" with musical notation.
- Dynamic Markings:** "ALL STRINGS DIM." is written at the bottom of the page.
- Handwritten Annotations:** "4 2" and "4 1" are written in the center of the page, possibly indicating a tempo or meter change.

Previous pages: Penis dimension, bars 189-196. Sample pages from the original score as shown at an on-line auctioning (Heritage Auctions).

See the "Penis dimension" paragraph from the next 200 Motels section for more about this piece.

Piccolo score

At the same time Heritage Auctions was auctioning the piccolo part of a piece I can't identify. Two sample pages with bars 90 through 159 were shown, with the score sections referred to as G through M. Again it's clearly Zappa's handwriting. During many bars this piccolo part is either pausing or sustaining one or two notes, so it must be only one of the parts of the composition (probably the reason why I don't recognize where it stems from).

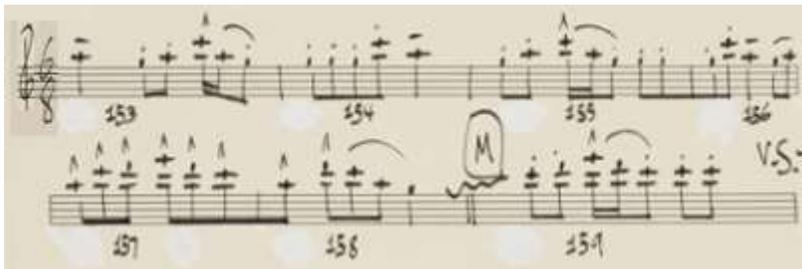


Piccolo part of an unidentified piece, bars 111-130. Sample bars from the original score as shown at an on-line auctioning (Heritage Auctions).

By itself it's another good example of the use of sequences:

- Bars 113-114 are a transposition of bars 111-112, going a major second down.
- Bars 119-122 offer two times a series of augmenting intervals, starting on different pitch. As the number of minor seconds steps being 2-3-4-5-6-7-8-11-14(-1).
- Bar 129 contains a motif, that's being transposed downwards chromatically as F-G-Gb-Ab, E-F#-F-G and Eb-F-E-F#.

The two sample pages include varying meters. Subsequently they are 3/4, 12/16 subdivided as 7+5, 6/8, 3/4 and 6/8. The example from above is in 6/8 only, obviously atonal. Next are bars 153-159, by themselves being diatonic. For these bars Zappa chose to continue notating in 6/8, but none of these bars follow the standard subdivision of 6/8 (3+3).



Bar 153 is subdivided as 2+2+2 (like 3/4), bar 154 as 4+2. Next you've got bars 155-6 and 157-8, where the notation is done in such a manner that Zappa makes it clear that he didn't want an accent on the downbeat of bars 156 and 158. The way the notes are grouped is decisive for where the accents lie. The reason for this notation is probably that other parts are doing something in standard 6/8 at this point.

CARNEGIE HALL - FINER MOMENTS

In October 2011 the ZFT released a large archive recording from the next year as "Carnegie Hall". It contains most of the two concerts the Mothers of Invention gave at this location, October 11th 1971, a one-time only event (photo to the left by Charles Hu). "The subcutaneous peril" from "Finer moments", a ZFT release from 2012, is another track that stems from these two concerts. Every once in a while Zappa played an early and a late show during a single night. The two shows are entirely different. As usual you've got differences in the versions played, compared to the already released ones.

Who are the brain police? (1971)

The opening riff of "Who are the brain police?" for instance is much different from the one played a year earlier. See the previous Fillmore East 1970 section for "Who are the brain police?" from 1970. This time it's used during several of the sung bars as well (bars 5-6 and 16-17). The rhythm, with its many triplets, has the same basis, but the riff is now moving through it in a syncopic way using a melodic line throughout.

Handwritten musical score for a piece in 4/4 time, featuring a bass line and a vocal line. The score is divided into systems, with bar numbers 1, 5, 9, 12, and 16 marked in boxes.

System 1 (Bar 1): The bass line features a complex rhythmic pattern with triplets (r-3-1) and sixteenth notes. The vocal line is marked "Bar 1 Repeats twice". The bass line is labeled "Keeps repeating".

System 2 (Bar 9): The bass line continues with triplets and sixteenth notes. The vocal line includes the lyrics "What would...". The bass line is labeled "As bar 1" and "etc.". The bass line is labeled "Keeps repeating".

System 3 (Bar 12): The bass line continues with triplets and sixteenth notes. The vocal line includes the lyrics "As bar 10" and "As bar 11". The bass line is labeled "etc.". The bass line is labeled "3rd beat".

System 4 (Bar 16): The bass line continues with triplets and sixteenth notes. The vocal line includes the lyrics "Yes-" and "Yeah--". The bass line is labeled "Acc. as in bar 1" and "Idem".

The score includes various musical notations such as triplets (r-3-1), sixteenth notes, and rests. The bass line is labeled "vab." in several places.

Who are the brain police? (1971), theme. Transcription: KS (4th printed edition, 2012).

According to Gail Zappa's writing in the CD booklet the recordings from this 1971 tour are complete. Gail and Joe Travers continue with commenting upon the equipment used and the format of the tapes, the latter posing a problem to play them for years since Joe became "vaultmeister". Apparently Zappa didn't have the best equipment at hand for every concert - this one is in mono - which might explain why he himself focused on only three venues for all of his own live recordings from 1971. It looks like the recording conditions were the best on these occasions.

It is known that Zappa had considered both the "Fillmore East" and "Just another band from L.A." albums to become double albums. "Fillmore East" would have included "Billy the Mountain" and the John and Yoko jam, but this failed because Zappa didn't feel like negotiating with Lennon's manager Allen Klein. This is clear because it got mentioned by Flo and Eddie in interviews. The fact that "Just another band from L.A." was at first constructed as a double album is also clear, but its content less. According to, among others, the www.progmaniac.de site, the album at first contained solos from for instance the Carnegie Hall concerts. "The subcutaneous peril", mentioned above, gets listed as an included track (outtakes only, because it lasts much shorter). I can't verify this, but seen the quality of Zappa's solos in it, it's possible. For the later "Playground psychotics" release from 1992 Zappa himself returned to material for what might have been sides 3 and 4 of "Fillmore East", but apparently not to the double album version of "Just another band from L.A.". The liner notes by Gail Zappa on "Finer moments" are, as usual, cryptical, vaguely suggesting that Zappa, in 1972, had been working on material from this CD to be included in a later release. The CD certainly has its finer moments. "Uncle Rhebus" got dealt with in the Uncle Meat section. The couple of guitar solos on this CD are fine. "Sleazette", like "Get a little" from "Weasels ripped my flesh", is a solo in E Dorian and similar in its sound. "The old curiosity shoppe" has its speed changed (it's out of tune with keyboard frequencies). It's the same type of solo as the 1970 "Holiday in Berlin" solo from above, to my knowledge the first time Zappa applied a I-II alternation in Lydian. Internet pages however attribute it to "Billy the mountain", which means that Zappa had transferred this type of playing to another song. He would return to this alternation a number of times during his career with several examples included in this study (see the Shut up 'n play yer guitar section for an overview). "Uncle Rhebus" contains the "Baked-bean boogie" solo, with a section taken from it to be found in the Weasels section from this study.

The subcutaneous peril

Here we continue with the two guitar solos from "The subcutaneous peril". Both have elements in them that are common for Zappa's solos, but also features that happen less often. The first section is the opening solo in D Dorian. The bass is giving a plain D pedal note, but the keyboards in staves 2-3 are playing a chord progression. It's done in a refined, rather delicate way, gently in the background. With a central chord per bar this progression is I-II-(III)-IV, next I-IV-III-IV-(III) and next I-III-I. This type of accompaniment is unusual in Zappa's output. Mostly it's a free improvisation instead of a progression like this when Zappa is playing a solo over a pedal note. For the solo itself you can see that Zappa is using the B as central note for bars 1-6. The solo begins with the descending motif D-C-B, to be varied upon at the beginning of bar 2. B is also the central note in bars 5-6, giving these opening bars a sense of a double tonality. As if Zappa is playing in B Locrian, while the bass indicates D Dorian. This is something that happens quite often in Zappa's solos. See the Shut up 'n play yer guitar section at the Heavy duty Judy paragraph for Zappa's comment upon this. In bar 7 the solo turns to an altered note, Db, to end on D natural in bar 8.

Guitar

12 *sva* →

The subcutaneous peril, section #1. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

The subcutaneous peril, section #2. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

This first guitar solo gets followed by a synthesizer, a keyboard and a drum solo. The drum solo begins with playing a three-note up going motif on the toms: G-Ab-Eb (6:50-7:06 minutes). It also ends with it at

10:54 and Zappa picks up this motif as the starting point for his second guitar solo. At 10:56 he plays his three-note up going motif: A-B-F, in the same tempo. He couldn't use the same pitches as the toms because he would continue in D Dorian as at the beginning. The transcription starts at 11:32 where this motif has been extended to a little theme: A-B-D-D-B-F-D. Bars 2, 3, 5, 13 and 17 are variations upon this theme. Bars 9-10 are more direct variations upon the original three-note motif itself. Now you've got three up going notes doing D-E-Ab and D-E-Bb. The altered notes Ab and Bb come out sharply because they are in dissonance with the A by the bass (the bass is continuing here as indicated in bars 2-3). This second solo at the end of this instrumental piece can be seen as exceptional in the sense that Zappa keeps varying this A-B-F motif over a very long period. Varying motifs is standard in Zappa's solos. See the "Mo' mama" example from the Sheik Yerbouti section for some comment upon this. But here Zappa sticks to varying one motif for over a minute and a half. Only at 12:31 new motifs/themes get into the picture and Zappa continues soloing as we are used to. Still the impact of the motif remains persistent: it returns at 14:37-14:45, 15:36-15:45 and 15:55-16:04.

You never know who your friends are (Harmonica fun)

The "Harmonica fun" track from the "Mystery disc" appeared to be a smaller edit of a recording that the ZFT released as "You never know who your friends are" on "Finer moments". Both CDs don't give any information whatsoever about the recording date and who's playing on it. The inclusion in "Finer moments", however, specifies the period as between 1969 and 1971.



You never know who your friends are, 0:39-0:48. Transcription: KS (update Spring 2018, deposited at the I-depot, The Hague).

When listening to Zappa's albums you get used to stylistic diversity, but still you can get at unexpected oddities. In this case folk music. "The lost episodes" contains two sea shanties, both credited as traditional. So not specifically written by Zappa, but he seemed to like them. The tune from "Jolly good fellow" was used as a starting point for an improvisation by the Ensemble Modern on "Everything is healing nicely". "You never know who your friends are" is twisted folk music with the Mothers playing just as much through each other as with each other. Several times phrases from traditional folk tunes can be recognized. Staves 1 and 2 from the example above are sung. The other four represent instruments, with staff four being the harmonica from "Harmonica fun". At this point the parts are using diatonic scales but different ones, so the whole becomes a weird pot-pourri, somewhere between chromatic and diatonic music. My guess is that it is a directed improvisation.

200 MOTELS (1971 ALBUM) - 200 MOTELS, THE SUITES: THE OVERALL PIECE OF ART

For much of his musical creativity in 1970-71 Zappa was focused on the scores for "200 Motels", the low budget movie from 1971, about The Mothers of Invention on tour and everything that comes along with it. It's the first Zappa album featuring a large orchestra. It was shot in only five days in January and February 1971, with techniques that at that time were innovating, but by now have become obsolete. The sound quality and cardboard constructions make it clear that we're dealing with a movie from 1971. This doesn't go for its content and the music. The music is timeless, as its recent performances have shown. The script for "200 Motels" might just as well be filmed today. Subjects as one's penis dimension and the size of one's breasts seem only to have grown in importance. The term *groupie* has become outdated, but not the phenomenon.

To the right (on-line version): still from the VPRO "Zappa films 200 Motels" documentary with Theodore Bikel, The Top Score Singers and The Royal Philharmonic Orchestra. Next to the examples below, I've included links to outtakes from "200 Motels" that appear elsewhere in this study. "200 Motels" premiered in L.A. on 29 October with the along coming double-album in the same month. It's too bad that the touring in 1971 ended with misfortune, so that the project got less promotion.

"200 Motels, the suites" is the shape Zappa had in mind for performing "200 Motels" on stage by an orchestra (plus singers and some electric instruments), thus without the movie scenes and without the rock band songs. It got premiered in this set-up during the Holland Festival in 2000 (see the miscellaneous items section from the left menu). In 2013 two more performances followed. One by the BBC Concert Orchestra, Southbank Sinfonia and London Voices in the UK and one by the L.A. Philharmonic and Master chorale in the US. A live recording with the L.A. performance has appeared on CD in 2015.

From the perspective of the music, the movie itself is of interest as well, next to the soundtrack and the suites CDs. Zappa starts his liner notes for the album with saying that some of the music in the film is not included on the album as well as the other way round. Bars from "Naval aviation in art?" can be heard as background music during the movie. This piece premiered on the "Studio Tan" album from 1975 and got recorded again in a different version on the "Perfect stranger" CD. See the corresponding section for the details. There's also a "Go to the club..." intro to the so-called *groupies* opera on the "Tengo na minchia tanta" bootleg. The official version of this song can be found only on the movie version of "200 Motels" at about 1h:12. The "True story of 200 Motels" DVD is a documentary about making "200 Motels". In it can be seen that Zappa had planned the *groupie* opera from "Fillmore East, June 1971" to be part of the movie. A rehearsal for a scene with "Do you like me new car" got saved in this manner. One can read the biography by Neil Slaven, chapter 10, with the author interviewing Zappa about "200 Motels". All other unused tape got erased for re-use in order to save some money (the film went a little over budget).

"200 Motels" at first met with moderately positive and mixed reviews. Many critics found the movie incomprehensible and the music chaotic. This is only correct to a certain degree and depends upon what you expect of a movie. For a number of people, some "intellectual" Zappa fans included, it is unacceptable that something they like does not have a deeper meaning or a theory behind it. In my opinion there is nothing to be "understood" about "200 Motels". It's a series of episodes about what can happen to a band on the road without an overall plot or specific purpose. At first hearing "200 Motels" can indeed sound chaotic. The music is a bewildering mixture of styles and instrumentation. It's only the relation with the movie that gives the "200 Motels" CD its unity. There's an orchestra, a large percussion section, a choir and a rockband. The orchestra can play in full, but also more chamber music like. Also here some people find that there has to be a system in the way Zappa composes, a theory that explains the method that makes music Zappa-like. My conclusion that Zappa didn't follow systems seems to be unacceptable to some just for conceptual reasons.

"Part of the problem is that Frank was clearly indefinable", co-producer Frank Filipetti says in the liner notes from "200 Motels - The suites". "Many people have a real problem with that. They find it necessary

to categorize anything other than themselves. It makes it easier for us in this complicated world to compartmentalize everything outside of our own little circle."

Likewise some people seem to find that Zappa can be better understood by comparing him to other composers and their techniques of writing music. Of course there are similarities between Zappa and Stravinsky, Varèse, Bartok, Ravel etc. But there are also similarities between Zappa and David Bowie, Abba, The Beatles etc. In fact there are such similarities between Zappa and thousands other composers or songwriters, so one could easily fill a mass of pages with comparative studies. It's neither wrong nor much illuminating. Bottom line is that the only thing that can clarify why some composers are considered geniuses, is their music itself. In this case a few comparative remarks can suffice. There are similarities between Zappa's approach to constructing "200 Motels" and the concept of a "Gesamtkunstwerk" Richard Wagner propagated in the 19th century, the overall piece of art. For Wagner the ideal situation meant that an artist combined all forms of art. In case of an opera, a composer should not only compose the music, but write the libretto as well and do the stage designing himself. Zappa did the same for "200 Motels", eventually winding up doing the editing of the film himself too. But there are also differences. "200 Motels" is a series of scenes that could be shot independently of each other. Their following order can be varied. For that matter the term "suites" is quite appropriate for the 2015 double CD with the orchestral parts on it. This was the form Zappa had in mind for playing "200 Motels" in the Royal Albert hall in 1971. It got banned for using inappropriate language. As mentioned above the live recording with the L.A. Philharmonic in the L.A. Master Chorale finally reached the market in 2015. It's a very welcome addition to the Zappa catalogue. Not only does this version contain a half an hour of music that couldn't be recorded for the movie, the sound quality and accuracy are also much better compared to the budget strained situation from 1971.

Below I'm trying to describe the tracks from the "200 Motels" 1971 CD in a combined manner with the corresponding parts from "200 Motels - The suites". For the 1971 CD I'm using the track list from the two discs of this double CD. For "200 Motels - The suites" I'm mentioning the 13 movements. I'm following the track list of the 1971 CD as the starting point for its additional rock band songs.

Disc I track 1: Overture - Suites mvt. 1: Overture

With the "Overture" and "Would you like a snack?" from "200 Motels" Zappa returned to the opening theme from "Holiday in Berlin (full blown)" from "Burnt weeny sandwich". The first six bars from the "Overture" are a character variation, a variation upon the G-E-A-G motif, that can be heard right at the beginning of "Holiday in Berlin (full blown)" as well (here in staff 2). The bass line is specific for the "Overture", whereas the "Holiday in Berlin (full blown)" version is applying some more chords and passing much faster through the notes.

The image shows a handwritten musical score for the opening bars of an Overture. The score is in 4/4 time and consists of seven staves. The first four staves are for strings, the fifth for woodwinds, and the sixth and seventh for percussion. Dynamics include mf, f, and mp. The score shows rhythmic patterns and melodic lines for each instrument.

Overture, opening bars. Source: original score.

The "Overture" starts in C with the I chord on beat one, to be blended with the II chord shortly afterwards in both bars 1 and 3 (C Lydian is also possible, the F/F# that makes the difference fails). These two bars are rhythmic variations upon each other. After the opening bars from above the original melody is followed more closely, now with an instrumentation for orchestra and choir. See also below for "Would you like a snack?".

Following the chorus part, you can hear the following sections on the 1971 album:

- 0:00 Bars 1-10, opening by the orchestra, with bars 1-6 being presented above.
- 0:29 Bars 11-17, indicated as section A, featuring the orchestra and chorus.
- 0:49 Bars 18-21, indicated as section B, idem.
- 1:02 Rance Muhammitz (Theodore Bikel) announces the movie, followed by modern music for percussion and orchestra. The chorus returns once, speech-wise singing "200 Motels". So there might have been a second page of the chorus part.
- 1:39 Rance introduces Larry the Dwarf (Ringo Starr), dressed up as Frank Zappa.
- 1:59 End.

1. 78

OVERTURE

The musical score is written on ten staves. The top two staves are for the woodwinds (Flute and Clarinet). The next four staves are for the strings (Violin I, Violin II, Viola, and Cello/Double Bass). The bottom two staves are for the Percussion. The music is in a common time signature and features a variety of notes, rests, and dynamic markings. The title "OVERTURE" is written in large, bold, handwritten letters at the top of the page.



Left: bars 1-4 from the "Overture", original score in Zappa's handwriting.
 Right: the chorus part in the handwriting of a copyist.

Disc I track 2: Mystery roach

"200 Motels" contains a set of regular pop songs. They are not presented as a suite of their own, but serve as resting points between the modern music for orchestra and choir. So they turn up spread out over the CD as individual songs. "Mystery roach" is placed between the previous "Overture" and the following "Dance of the rock and roll interviewers". It's straightforward rock 'n roll in 4/4.

9

Asbarg

Asbarg

Barg repeats

Asbarg

Asbarg

Asbar 10

13

Abit faster

First tempo

Mystery roach, opening. Transcription: KS. Update winter 2015 (deposited at the I-depot, The Hague).

The example contains the central theme:

- Bars 1-4. Instrumental opening with a I-VII alternation in E Dorian (Dorian and Mixolydian happen both, I've notated the presets of the song as in Mixolydian, but Dorian could be chosen just as well). A figure of two bars gets repeated four times. The example begins with the last two occurrences of the figure. Beats 1-3 of the first bar is the E note pulsing. Beat 4 can be interpreted as I 7th with the A as passing through note or as V 7th. In the second bar the switch from the I chord to the VII chord takes places, syncopically during beat two.

- Bars 5-6. Phrase 1 of the theme. The bass continues with the I-VII alternation, while rhythmically the switch can now occur at various points during the second bar. The guitars change their pattern to a one-bar movement, also with an I-VII alternation. The VII chord for the guitars appears on beat 3 in the shape of an A-D-A-D string.

- Bars 7-8. Phrase 2. The singers continue in E Mixolydian, thus another example of mingling two closely related scales (E Dorian and E Mixolydian). As usual, when Zappa has more than one singer doing the lyrics, they don't sing their lines identically. It's done in a complementary form, enriching the harmonies.

- Bars 9-12. Phrase 3. Everybody is now playing or singing in E Dorian. The brass (staves 2-3) is here getting clearer in the picture, while the opening is dominated by the classic rock band combination of guitars - bass - drums.

- Bars 13-15. Phrase 4, a variation upon phrase 2, played twice. Only briefly the piece returns to E Mixolydian. It's performed in two different manners with a lot of chromatic notes happening in it. During beats 3-4 of bar 15 bass and drum accelerate a bit, immediately to return to the original tempo in bar 16. The grammar and pronunciation of the lyrics get twisted to fit in better with the music. What seems to have been "The mystery roach is approaching" gets pronounced as "Dah myst'ry roach be 'proach-ah".

- Bar 16. Phrase 5, a one-bar figure played only once. Now the rhythm changes from standard on-beat 4/4 to a syncopic figure.

Disc I track 3: Dance of the rock & roll interviewers - Suites mvt. 7: What's the name of your group

Here the effect of the limited recording time becomes clear. The music from "What's the name of your group" is doable and its corresponding scene would have fitted well in the movie. It lasts 11 minutes in total, but only one minute could be recorded as the "Dance of the rock & roll interviewers". The main theme from its opening block is derived from the "Epilogue", a piece that was played live earlier in 1968. Bars 5-10 from my Epilogue example from the uncle Meat section re-appear a couple of times and get varied upon. The example below is from the second block, where the choir and the solo soprano stand central.

The image shows a handwritten musical score for the piece "What's the name of your group". It consists of four staves. The top staff is for the Soprano, with the lyrics "How do they like your mu-sic" and "o ver-ther-". The second staff is for the Alts, with the lyrics "How do they like your mu-sic" and "o ver-ther-". The third staff is for the Horns, with the lyrics "How do they like your mu-sic" and "o ver-ther-". The bottom staff is for the CB/Bassoon. The score is written in 4/4 time and features a key signature of one flat (B-flat). The music is characterized by a syncopated rhythm and a mix of Dorian and Mixolydian scales. The lyrics are written in a cursive, handwritten style.

accompaniment by the orchestra section (contrabasses, bassoons and occasionally the horns). The example goes as:

- Bar 1: The writing style in this example is mixed, to a degree homophonic and to a degree polyphonic. One can see that the four parts from the choir and the accompaniment follow their own lines. But their rhythm is identical, so combined they also sound as a series of chords. During bar 1 the series of intervals between the alts and sopranos is 7-4-7-4-7-4-7 (as the number of minor second steps), so an alternation between a 5th and a major third. The sopranos sing a downward line, the alts a line that alternates going up and going down. The final eighth note is a repetition of the fifth note from both rows. The key tends towards D Dorian, with some altered notes.
- Bar 2: The interval series now is 7-4-4-7-7, thus continuing with 5ths and major thirds in a different pattern. The contrabass, bassoons and horns are continuing a pattern that was also used during the bars preceding this example. In this particular bar the scale becomes D minor/Aeolian with a Bb. In every bar a change to a different meter is happening, but the principal time units remain fourth and eighth notes.
- Bar 3: The tenors and basses are taking over, singing unisono.
- Bar 4: A D pedal for the whole bar, with the scale returning to clear D Dorian with no altered notes. The alts and sopranos return with the interval series 7-4-4-5-8, so other intervals enter the picture.
- Bar 5: The female singers continue with the interval series 4-8-4-8-7-3. The contrabasses and bassoons are playing some counterpoint notes, as in bar 3.
- Bar 6: This is mainly the male singers and the accompaniment playing unisono, but there are also various supplementary harmony notes. At this point the contrabasses and bassoons start to divert themselves from each other.
- Bars 7-8: These two bars are purely homophonic. A chord with the notes D-A-B-E-G# in it is being built up in layers in two slightly different manners, spread out over more than three octaves. It's a relatively consonant chord till the final G# by the soprano turns up, in dissonance with A by the tenors. During bars 5-8 the idea of a D Dorian scale gets abandoned, but the D turns up as pedal note again for the final chord. One might call the implied scale at this point D Lydian, as far as one interprets these bars as diatonic.

During the final block of "What's the name of your group" the orchestra is playing in full. You can hear motifs from the previous block returning. It's also this block where the orchestral track "Dance of the rock & roll interviewers" stems from. The piece ends with the soprano, the rock & roll interviewer, fading out.

Suites mvt. 8: Can I help you with this dummy?

During the suites, "What's the name of your group" gets segued by "Can I help you with this dummy?". The score is reproduced in total in The Frank Zappa songbook, vol. I. As Zappa comments in the Songbook, this piece didn't make it to the movie because of performing difficulties. The L.A. Philharmonic is playing a revised version. Both the notes and the orchestration are different in a multitude of aspects. While the score for the 1971 recordings were adapted on the spot to ease the performability, in this case the conclusion can only be that there are two versions of the score of this movement itself. Below I'm describing bars 11-17.

11

Soprano

He's not ve-ry, ve-ry, hea-ry.

Strings

Wind instruments

Guitars

Bass players

trab.

Detailed description of the musical score: The score is written in 4/4 time. The Soprano part begins with a rest in the first measure, followed by the lyrics 'He's not ve-ry, ve-ry, hea-ry.' The Strings part provides harmonic support with chords and melodic lines. The Wind instruments section includes parts for Flute, Clarinet, and Saxophone. The Guitars part features a melodic line with some bends. The Bass players part provides a steady bass line. The score includes various musical notations such as notes, rests, and dynamic markings.

15

Soprano

Flute
Eva Ha, ha--- 9:6 Ha

Slower Ritardando

Strings 9:6

Wind instruments

Guitars 9:6 3

Bass players

Eva.

Can I help you with this dummy?, bars 11-17, The Suites version. Transcription by KS (update 2016, deposited at the I-depot, The Hague).

Notes:

- Some elements could be taken over from The Songbook (see the next example).
- All pitches are concert pitches, except for the guitars. These are notated an octave higher as they sound (the standard I'm following all through this study when I'm notating the guitar as the instrument to play a staff).

Can I help you with this dummy?, bars 11-17, The Songbook version. Original score in Zappa's handwriting, as reproduced in The Songbook Vol. I.

- Bar 11: The Songbook version is deliberately irregular and dissonant. Guitars II and III are playing the same chord type, but with a minor second between them. The suites version is also irregular, but more moderately. Other than the atonal Songbook version, beats 1-2 can be seen as diatonic, forming the Bb Lydian collection.
- Bar 12: During this bar both versions are diatonic and the chords contain largely the same notes. The suites version builds a chord up in layers towards a 13th chord on G, the scale being G major. Apart from a number of other details, the differences lie in the instrumentation and positioning of the chords. For the suites the horns have been substituted by the string section. The Songbook also knows a contrabassoon, playing a low C. The scale then becomes C Lydian.
- Bar 13: In the Songbook the last chord from bar 12 gets repeated on the first tick of bar 13, while the chord changes to another larger chord during the suites. On the fourth tick a sustained chord enters the picture, again a larger chord comprehending the notes E-A-B-D. It's played by the guitars and horns in the Songbook and by wind instruments solely during the suites.
- Bar 14: The chord from bar 13 is sustained in both versions. The differences between the two versions

otherwise only concern the instrumentation. The flutes in the Songbook have been replaced by the strings during the suites.

- Bar 15: Here for the first time the soprano part starts to deviate as well. Some of the notes from the ninetuplet are different. In the Songbook Zappa is very precise about the accents: the fourth note of the ninetuplet is accentuated and the other notes should be played as even. The suites version doesn't have this. There are only light accents on the higher notes. In the Songbook score you'll find the piccolo, bass flute and guitar I playing parallel with the soprano during the ninetuplet. The intervals are kept the constant for the duration of the ninetuplet. The piccolo plays the same part as the soprano, the bass flute is playing a minor tenth lower and the guitar is playing a tritone lower than the soprano. The chord can be seen as a diminished minor fifth, with the third played an octave lower. The whole is atonal. During the suites only a flute plays along with the soprano. The guitars aren't playing the sustained chord for this bar. Instead they are used to pick some notes in an irregular manner.

- Bars 16-17: The music becomes diatonic, using the E Mixolydian scale. The wind instruments are playing the progression I-V 7th-I during The Suites. During the tail of bar 16 the A alters to A sharp, implying a switch to E Lydian. In the Songbook score guitars I/II and the solo violin and cello are playing fast strings of notes, largely absent during the suites.

Disc I tracks 4-8: Tuna sandwich sequence - Suites mvt. 4: This town is a sealed tuna sandwich



On the 1971 album you'll find the Tuna sandwich material subdivided into five tracks:
- I'm dealing with this prologue in the Studio Tan section, where you can see some differences between the score and the 1971 album version.

- "Tuna fish promenade". See below for a few samples.

- "Dance of the just plain folks". The Tuna sandwich music received its first public performance in 1970 with Zubin Mehta conducting the L.A. Philharmonic. In the Quaudiophiliac section I'm showing the opening pages of the score, where this section is called "The tuna sandwich ballet".

- "This town is a sealed tuna sandwich (reprise)". The sung lyrics of the reprise are the same as of the prologue, but the orchestration and harmonization are a variation upon it.

- "The sealed tuna bolero". This bolero isn't a bolero by the book, but bolero-like. It has a fourth beat added to it (a bolero is in 3/4), but it does have the characteristic faster notes on tick two of beat one. In this case a triplet instead of two 16th notes. The 16th notes are used elsewhere too, so the triplet notes are the fastest ones (except for the ad lib. harmony fill-in and bar 4). So it's a bolero with some liberty. Zappa would perform the well-known "Bolero" by

Ravel with his band in 1988. Bars 1-4 are in D Mixolydian. During bars 5-8 the singers are present. Now the orchestra and singers are following a chord progression, being D-Eb-E, thus a major triad moving upwards in a chromatic manner. Bar 8 continues with A.

1

mf

mp

mf

mp

mf

mf

15ma

8va

4

mf

mp

mf

mp

mf

mf

Harmonic fill-in, ad lib.

This Town

7

The image shows a musical score for 'The sealed tuna bolero'. It consists of six staves. The top two staves are in treble clef with a key signature of one sharp (F#). The third staff is in treble clef with a key signature of one sharp and an '8va' marking above it. The fourth staff is in treble clef. The fifth staff is in bass clef. The bottom staff is a drum set part with a snare drum and a bass drum. The score includes various musical notations such as notes, rests, triplets, and dynamic markings like 'x'.

The sealed tuna bolero, 0:00-0:24. Transcription: KS (reduced and by approximation). Update Spring 2018 (deposited at the I-depot, The Hague).

Zappa started working on this material around 1968. Various elements can be recognized in tracks from the "Ahead from their time" CD. See the corresponding section with "The rejected Mexican pope leaves the stage" as an example. As mentioned above part of the "Epilogue" from this CD returns in "What's the name of your group?" from the suites.

This sequence got reworked upon twice for a smaller and a large orchestra, on both occasions without lyrics. Zappa changed the title for this separate piece from "This town is a sealed tuna sandwich" to "Bogus pomp":

- "Bogus pomp" (1975). Three smaller examples from "Bogus pomp" are presented in the Studio Tan section of this study.
- "Bogus pomp" (1983). This is the last appearance of the Tuna sandwich music, this time combined with the "Overture" and "Centerville" movements from "200 Motels". It's played as one piece, without lyrics. It also has a new coda. I'm describing it briefly in the L.S.O section of this study, with a couple of re-orchestrated bars as an example.

Below at track 13 you can see how "Centerville" precedes "This town is a sealed tuna sandwich" in the score. Zappa set them apart on the album, but their intended sequence is back on The suites. It's also logical. Centerville is the town that's compared to a tuna sandwich. The two sample pages from the chorus part, included below, cover the following period of bars, though most are empty for the chorus having no part in it:

- Bars 114-181. "Centerville", end of scene I through scene K.
- Bars 182-192. "This town is a sealed tuna sandwich", 11 bars in 2/4 (see the Orchestral favorites section). Beginning of scene L.
- Bars 193-221. "Tuna fish promenade" in 4/4, including the indicated lines with "The cause of the tickets back to L.A."
- Bars 222 etc. "Tuna fish promenade", continued in 2/4. Scene M, beginning with lyrics for the choir: "All the people in the sandwich town".

Above to the right and below to the left: samples from the scores in Zappa's handwriting.

Disc I track 9: Lonesome cowboy Burt

A parody-like country and western song, featuring Jimmy Carl Black as the ill-mannered redneck Burt (screenshot below). He would return to do a cowboy song once more on "You are what you is" from 1981 (see the corresponding section). He released a live version from 1987 on "The best band you never heard in your life", with various differences with the original and the lyrics adapted for commenting upon Jimmy Swaggart's recent arrest.

The song begins quite simple with playing around a I-V-I-V-VII-IV-VII-IV progression in C Mixolydian. It's not only the tight 4/4 rhythm with off beat drumming, as well as the bass pattern, that cause the pastiche effect. It's also the lyrics that are pushing you towards a parody interpretation. Less conventional is the structure of the song, that's a bit collage-like. The opening theme takes up the first 50 seconds of the song, but doesn't return anymore. Other themes are taking over, that do get varied upon.

- 0:00-0:53 Theme one, largely as above.
- 0:53-1:28 Theme two ("I'm lonesome cowboy Burt, speaking at you").
- 1:29-1:51 Theme three ("He's lonesome cowboy Burt").
- 1:52-2:58 Theme four ("Burtram, Burtram red-neck").
- 2:58-3:18 Theme two returns.
- 3:18-3:47 Theme three returns in the shape of a slower variation, serving as the coda.
- 3:48-3:57 Spoken end ("Opul, you hot little bitch").

The image shows a handwritten musical score for the song "Lonesome cowboy Burt". The score is written on five staves. The top staff is the vocal line, starting with a circled '1' above it. The lyrics are: "My name is Bur-tram —, I am a". The second staff is the guitar line, with a treble clef and a key signature of one flat. The third staff is the bass line, with a bass clef and a key signature of one flat. The fourth staff is the piano line, with a bass clef and a key signature of one flat. The fifth staff is the drum line, with a key signature of one flat and a 4/4 time signature. The drum line includes a 'Vab.' (vamp) section. The score ends with "Etc." in the bottom right corner.

Handwritten musical score for "Lonesome cowboy Burt". The score is written on six staves. The top staff is a bass clef with lyrics: "red-neck. All my friends —, they call me Burt. ALL my". The second and third staves are treble clefs with lyrics: "Hi — Burt.". The fourth staff is a treble clef with a melodic line. The fifth and sixth staves are bass clefs with lyrics: "As bar 1" and "As bar 4". The word "Svab." is written at the bottom left.

Lonesome cowboy Burt, 0:00-0:12. Transcription: KS. Update winter 2018 (deposited at the I-depot, The Hague).

**Disc I track 10: Touring can make you crazy - Suites mvt. 6:
Touring can make you crazy**

Modern orchestra music, played integrally on the 1971 album as it is played during the suites. It's written for the string section, with a couple of notes for the clavichord added to it.

During the early seventies, when Zappa wrote for orchestras, the Wazoo band and the Roxy band, he had ensembles at his disposal where most people could read sheet music. It was also a period where everything had to be hand-written and duplicated by copyists. The official 200 Motels scores are only for rent, but quite a number of examples are available through other sources. The Frank Zappa songbook contains three original manuscripts and in the CD booklet four sample pages of the full orchestra score are reproduced. You need a magnifying glass for these last examples. Apparently not everybody was asked to return their scores in those days. Frequently handwritten scores by Zappa



himself are being auctioned.

A musical score for a section titled "Touring can make you crazy". The score consists of six staves. The top three staves are in treble clef, and the bottom three are in bass clef. The music is written in 9/4 time. The first staff has a melodic line with some slurs and ties. The second staff has a similar melodic line. The third staff has a more rhythmic line with eighth notes. The fourth staff has a bass line with eighth notes. The fifth and sixth staves have a steady eighth-note bass line. The score is transcribed by KS (update 2019) and deposited at the I-depot, The Hague.

Touring can make you crazy, section. Transcription: KS (update 2019, deposited at the I-depot, The Hague).

"Touring can make you crazy" is for the string sections only. As you can see in the image above to the right, it begins with sustained notes in 9/4. The example above is taken from the section where the cellos/contrabasses are making a descending movement with pulsing eighth notes in 3/4. Because of that, the rhythm of these bars is relatively easy to transcribe. The harmonies are an entirely different matter. These are made up of larger dissonant atonal chords. It's difficult to hear the exact notes involved from CD, because of which I can't do more with it from the analytical point of view. And even if you had the score: various examples show that it's more a rule than exceptional that there are version differences. The example is transcribed from the "200 Motels, the Suites" version (2015).

Disc I track 11: Would you like a snack? - Suites mvt. 2: Went on the road

To the standard orchestra set-up for playing the suites, a small electric combo is added. They stand central during this movement and the vamping part of "Penis dimension". Like the "Overture", "Would you like a snack?" refers to the opening theme from "Holiday in Berlin (full blown)" for its thematic material.

I

mf We're on the road.

mp Continues

mf

mf Etc., Cpedal

avabassa mf mp

II

mf

Etc., Ebpedal

avabassa

III

mp

mf

5 10

Would you like a snack?, 0:39 till 1:09. Transcription: KS (update 2010, deposited at the I-depot, The Hague).

Note: The 3x2 meter is notated this way to specify the rhythm accents here clearer (6/4 could also be 2x3), three bars with 2/4 is also an option. See also the main text for notation differences.

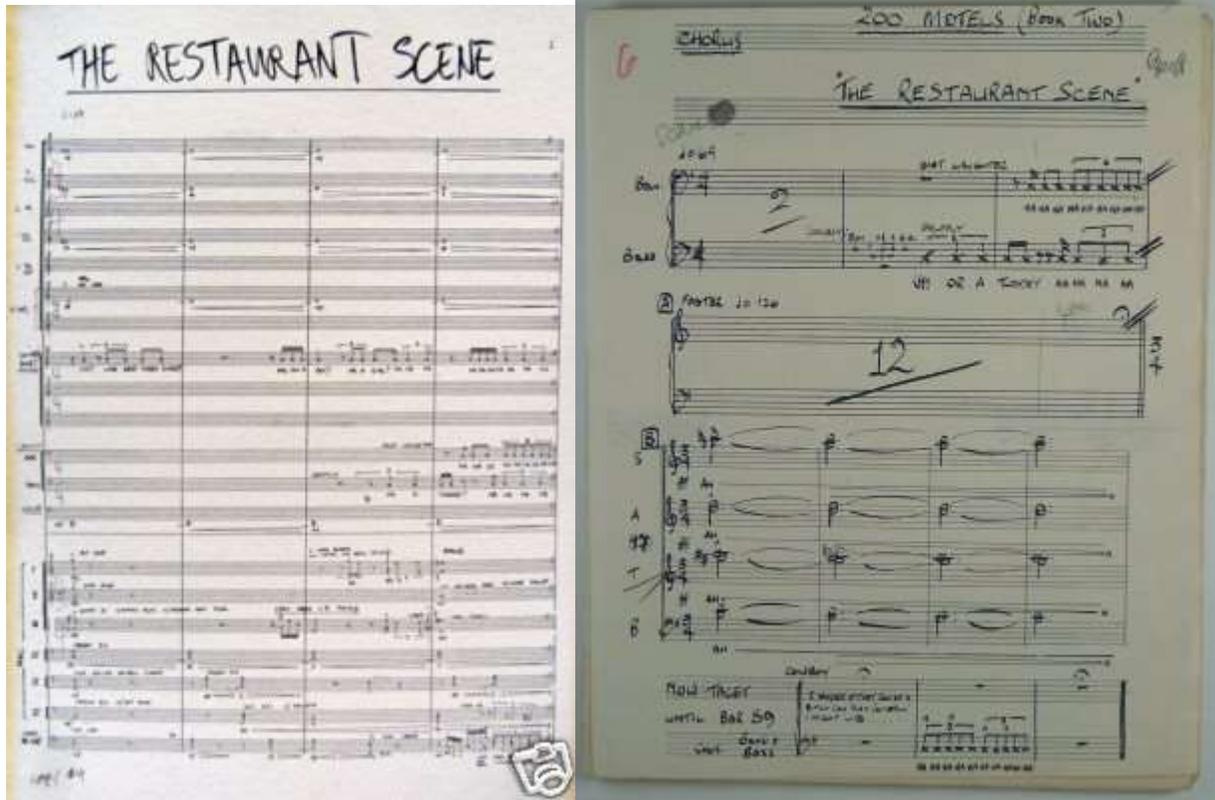
It's a variation upon this theme, played in two different instrumentations. The first one is all instrumental, the second one is with lyrics. It's this last one that's transcribed above. Notable are the various modulations and the way they are handled. During bars 1-4 the music is in C with the I 5th chord (or C Lydian, the F/F# isn't used). Then in bar 5 it turns to Eb Lydian I 7th. The chords belong to different keys and only have a G in common, only vaguely audible in the second chord. In a traditional harmony class they'd say you need some more linking chords. Here you get the interesting effect of a harmonic surprise. Bars 13-15 are in C# minor (C# pedal), bars 16-17 in Ab Lydian (Ab chord) and with bar 18 the transcription ends in D Lydian (D chord). Remarkable are also the large interval jumps the singers are making, for instance a 10th from bar 5 to 6 ("What a drag ...").

It occasionally happens that samples from the original score turn up after I've transcribed them. The following two notational differences originate from this:

- The sample above at track 10 shows that Zappa used an eighth note for what I'm notating as a quarter note. So two of my 4/4 bars correspond with one 4/4 bar in the original score.
- Bars 13-19 correspond with section B from the chorus part from the "Overture" (see above at track 1). Zappa notated 3/4 and 2/4 for my bars 16 and 17, thus making a different division.

Disc I track 12: Redneck eats - Suites mvt. 5: The restaurant scene

The opening features spoken text combined with harmony notes. It involves the chorus as well, so to let everybody stay equal, at least the rhythm of the words had to be written out. Staff eight of the left image is the "cowboy" part by Jimmy Carl Black, saying "hey, who are these two, are they boys or girls ...". In bars 3-4 the chorus joins in with "or a turkey, ha-ha-ha ..." (staves 10-11). All spoken words are notated with crotchets, so no exact pitches are prescribed. The accompanying harmony notes by the instruments do have pitches.



Left: the opening page from "The restaurant scene" in Zappa's handwriting.
 Right: the chorus part taken from it, in the handwriting of a copyist.

The first four bars of both images coincide. The A block from the right image is the percussion section from this piece. The chord by the choir sets off the B block, to be heard at 0:38 on the "200 Motels" CD from 1971. This block begins with a series of pizzicato notes for the string sections, followed by a section with the piano standing central. At the end the cowboy returns, with "ha-ha-ha ..." for the chorus in an exact rhythm some more.

Disc I track 13: Centerville - Suites mvt. 3: Centerville

Centerville was the name of an imaginary small town, constructed in one of the Pinewood studios, where "200 Motels" was filmed. The music appears without many differences on the 1971 album, the suites and as a movement from the 1983 version of "Bogus pomp". During the latter piece "Centerville", however, is performed without lyrics. The next example is the opening and the chorus part, that Zappa apparently had in mind when originally composing this title.

114 Slow

Musical score for measures 114-118. The score is in 3/4 time and consists of eight staves. The first four staves (treble and bass clefs) contain sustained notes with a *ppp* dynamic. The fifth staff contains a vocal line with lyrics: "Bars 1-8 with wind machine and some knocking sounds" (measures 114-116), "mp" (measure 117), and "mf Cen-ter-ville" (measure 118). The sixth staff contains a bass line with a *mf* dynamic. The seventh and eighth staves contain bass lines with a *mf* dynamic. A note in the eighth staff is marked with "basses 1: pizzicato" and "basses 2: tremolo".

Musical score for measures 119-122. The score is in 3/4 time and consists of eight staves. The first four staves (treble and bass clefs) contain sustained notes. The fifth staff contains a vocal line with lyrics: "a - real ..." (measures 119-120), "mf" (measure 121), and "mf" (measure 122). The sixth staff contains a bass line with a *mf* dynamic and a triplet of eighth notes. The seventh and eighth staves contain bass lines with a *mf* dynamic and a triplet of eighth notes.

The image displays a musical score for the opening of 'Centerville'. It consists of 12 staves, numbered 5 through 12. The notation includes various musical symbols such as notes, rests, and dynamic markings. The key signature has one flat (B-flat). The score is divided into three measures. The first measure shows the beginning of the piece with a long note in the first staff. The second and third measures show more complex musical textures with multiple instruments playing. Dynamic markings include *pp* (pianissimo) in the first four staves, *mf* (mezzo-forte) in the fifth, sixth, and seventh staves, and *normal* in the eighth staff. The *Contra Bassoon* part is marked *mf* and *normal*. There are also some triplets indicated by a '3' in the third and eleventh staves.

Centerville, opening. Transcription from CD by KS (staves 5 and following, reduced) plus the chorus score from below (staves 1-4). Update Spring 2018.

The chorus part of Centerville (handwriting of a copyist).

This chorus part was meant for harmonizing 0:00 through 1:01 of this composition, but got skipped between 0:00-0:35. The correspondence can still be recognized, as well as the sung bass part from bars 120-121 and bars 124-129. This part is played by bass instruments on the album. Maybe faintly in the background the chorus is singing between 0:36 and 1:01.

- 0:00 Bars 114-117. Intro with a chromatic bass line and wind machine. I've indicated the chorus as ppp and I've included their part in the on-line midi file too. On CD I can't hear them, but one of their chords is instrumentally audible in bar 116.

- 0:18 Bars 118-125. Bass line continues with sung lyrics ("Centerville, a real nice place ..."). The bass line from bars 118-121 returns in bars 122-125, an octave lower. Otherwise it's a rather free movement. Overall a downwards movement dominates, alternated with smaller sections where notes can go up and down.

- 0:36 Bars 126-133. Block "I" from the total score with chords ("Churches ...").

- 1:01 Bars 134-147. Instrumental themes. Here the meter changes from 3/4 to 2/4.

- 1:44 Bars 148-163. Flutes and soprano section, turning back to 3/4. Bars 161-163 for boy sopranos are sung by female sopranos. These are the only chorus bars that are clearly recognizable.

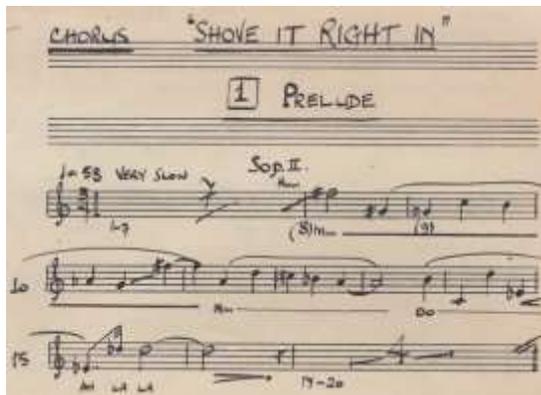
- 2:01 Bars 164 till the end of "Centerville". The score indicates 18 bars, but there aren't that many included in the album track. This instrumental outro of "Centerville" also serves as the intro for the "Tuna sandwich" suite. Between 2:07 and 2:15 you can recognize the central motif of what later became "Bogus pomp". See the Orchestral favorites section from this study for variations upon this motif. Here can hear and see in the score that "Centerville" was originally planned to precede the "Tuna sandwich" suite. In the 1983 version of "Bogus pomp" Zappa did include "Centerville" again in this manner.

- 2:31 End.

Disc I tracks 14-19: She painted up her face sequence - Suites mvt. 11: Shove it right in

Most of the music from "Shove it right in" appears on the 1971 album as well, where it gets alternated with the theme from "She painted up her face", a pop song. For this reason I'm calling the album set-up an example of a rondo in the Orchestral favorites section. The "She painted up her face" theme returns in "Half a dozen provocative squats" and "Shove it right in". The lyrics are different, but the notes from the theme are played only slightly different as it comes to details. "Mysterioso" is an interlude with normal and glissando chords for the string section, all at a piano or pianissimo volume. The tracks, as they are titled on the album:

- "She painted up her face".
- "Janet's big dance number".
- "Half a dozen provocative squats".
- "Mysterioso".
- "Shove it right in".
- "Lucy's seduction of a bored violinist & postlude".



A printed musical score for the piece "Shove it right in". It features a vocal line for Soprano II (Sop. II.) and an orchestral accompaniment. The vocal line starts with the syllable "Ah" and includes a fermata. The orchestral accompaniment consists of strings and woodwinds. The score is in 3/4 time and includes a double bar line at the end with the marking "8va b.". The key signature has one sharp (F#).

Janet's big dance number, section. Transcription/score: KS (update Fall 2019)/Material from the images from the main text (on-line version).

The example above is being played between 0:20 and 0:44 on "The suites", returning in the shape of a variation between 0:20 and 0:44. On "Janet's big dance number" it's played between 0:26 and 0:55. Again there are differences between the 1971 and 2015 CDs. In this case I think it's the mixing. The piano and strings are far more prominently present on the 1971 album. The arpeggio chord from the first bar is either mixed to inaudible or really absent on the 2015 CD. I've transcribed it by listening to both versions, using the material from above. It's a slow movement in 3/4, using an atonal chord progression for singers and orchestra. Pretty irregular, though transpositions of movements can be recognized, as indicated in the score:

Figure B is equal to figure A, being transposed up a major second.

Figure C is equal to figure D, being transposed up a minor third.

"She painted up her face" is one of the themes Flo and Eddie are singing on "200 Motels". It's the opposite of the fast strings Zappa can be using in songs like "Call any vegetable", going slowly with notes lasting over bars. Personally I like the way they're singing here best, namely with bright voices, not the raw screaming notes they often apply elsewhere. Bars 1-3 are in B Dorian. Over the Bm chord a downwards string is played, touching all notes but the A. From bar 4 onwards this piece is in E Mixolydian. The harmonic basis of the main theme is a slow I-VII alternation.

As said, this theme returns during the first half of "Half a dozen provocative squats". The second half contains two themes, specific for this track. The example above comprehends the opening of the first theme, played halfway. It shows an interaction between the lyrics and the music. The words are chosen musically to form an even series of eighth notes. The meters, on the other hand, are dictated by the length of the sentences. So you've got 12/8, 6/8 and 9/8. Harmonically this theme is for Zappa standards rather

simple. Bars 1-4 are a sequence of triads in G. Bars 5-8 are in F Lydian with sung chords over an F pedal by the bass. While everything has been pretty even so far, the bass is using another subdivision of the 9/8 meter in bar 7 to vary things.

The image shows a handwritten musical score for the piece "She Painted Up Her Face". The score is written in 9/8 time and consists of three systems of staves. The first system includes a guitar staff with a treble clef and a key signature of two sharps (D major), and a bass staff with a bass clef and the same key signature. The guitar part features a sequence of triads in G major in the first four bars, followed by F Lydian mode chords in the next four bars. The bass part provides a steady accompaniment, with a notable subdivision in bar 7. The second system continues the guitar and bass parts, with the guitar staff showing a melodic line and the bass staff providing a rhythmic foundation. The third system concludes the piece with a final melodic phrase in the guitar and a corresponding bass line. The word "bass" is written below the bass staff in the first system, and "bass" is written below the bass staff in the second system. The word "bass" is also written below the bass staff in the third system.

She painted up her face, main theme. Transcription: KS (update 2005, 3rd printed edition 2007).

8va

12/8

12/8

12/8

12/8

12/8

12/8

Half a dozen--

Half a dozen--

Ah--

Uh--

(plop)

(scratch)

8va

9/8

9/8

9/8

9/8

9/8

9/8

Half a dozen provocative squats, section. Transcription: KS. Update winter 2018 (deposited at the I-depot, The Hague).

Both the "She painted up her face" sequence and the orchestral "Shove it right in" are collages. This also goes for the included "Lucy's seduction of a bored violinist & postlude" by itself. It's not directly related to the other sections and during the movie it's used as the accompanying music during the credits at the end.

The image displays a handwritten musical score for a piece titled "Lucy's seduction of a bored violinist & postlude". The score is arranged in two systems, each containing five staves. The top staff of each system is in treble clef, while the bottom staff is in bass clef. The middle three staves are in bass clef. The music is written in 7/8 time and features various dynamics such as *mp*, *pp*, *mf*, and *p*. The notation includes notes, rests, and slurs. The bottom staff of the second system is labeled "Vrb." and contains a rhythmic pattern of eighth notes. The score is a transcription of a film score, showing a collage of musical elements.

Lucy's seduction of a bored violinist & postlude, 0:19 till 0:36. Transcription: KS. Update winter 2018 (deposited at the I-depot, The Hague).

The example above contains the opening bars of one of the sections "Lucy's seduction of a bored violinist & postlude" is made up of. In the liner notes of the "Dance me this" booklet, Todd Yvega explains the idea behind what Zappa called "burglar music": "To explain burglar music requires a little digression - but even this story ties into Frank's appreciation for the sciences (mathematics in this case). We were discussing a musical technique called phasing in which several parts play simultaneously with each looping but with each having a different loop length. Although the individual loops may be relatively short, the piece as a whole doesn't repeat until all the individual looped parts realign in exactly their original orientation. By choosing loop lengths that are relatively prime to each other one can achieve a very long period between exact repetitions (hours, even a day or more)." The example above might be called an easier example of such burglar music. Bars 1-4 show a bass pattern using two alternating meters, 7/8 and 6/8. This pattern last 13/8 in total and keeps being repeated during this block, though with small variations. On top of this a second descant melody starts in bar 5 (staff 1). This melody lasts 24/8 in total, before it gets repeated at the dashed line in bar 8 of my example. Both melodies keep being repeated, so you've got these two melodies in a loop, starting at bar 5. It can be calculated when they return in exactly this position: after 13 times playing the descant theme or 24 times the bass figure. Mathematically the equation is $13 \cdot (24/8) = 336/8 = 24 \cdot (13/8)$. The descant theme lasts about 7 seconds, being played six times between 0:27 and 1:08, not enough times to get a complete "burglar music" cyclis.

The descant theme is played over evenly sustained harmony notes, letting the orchestra sound like bagpipe players. Staves 2-4 of bars 6-10 are filling in the harmony with other floating notes and arpeggios. The music is diatonic, but not following a standard scale. It starts as C Dorian with an E flat, but its tail is from C major. The Eb only shows up at the beginning of this block in bars 3 and 5, so for the remainder it sounds as major. Above to the right string players from the orchestra during this section, one of several sections from the movie with colour effects.

Disc II tracks 1-3: Stealing the towels, Dental hygiene dilemma and Does this kind of life look interesting to you? - Suites mvt. 10: I'm stealing the room

Both movements 10 and 11 from the suites are a couple of individual tracks from the 1971 album grouped, rather than that the album tracks are subdivisions of one piece.

In this case:

A) "I'm stealing the towels".

"I'm stealing the towels" is written for an orchestra with choir. It's rather wild atonal music with varying meters. Much of it is instrumental. The mix isn't bright enough to get to a certain transcription regarding the harmonies. Because of this I can't comment upon the chords being used, but their variation and atonality can be clear.

The example above gives some idea of the character of this piece:

- Bar 1 is in 14/16, beginning fast, but gradually slowing down to a more normal tempo. This should be happening at the beginning of block A in the chorus sheet below, but isn't present there in this manner. Bars 1-28 from the chorus sheet are only present to let the chorus know the outlines of what's going on before they have to enter, mostly empty bars with their meters. So I don't have enough clues to compare the score and the example above, transcribed from the 1971 album.
- Bars 2-5 contain a figure in 11/16, being played four times. Next to the atonal chord progression by the descant instruments, a counterpoint bass movement can be heard. Now these bars do correspond with bars 22-5 from the chorus sheet below.
- Bar 6 in 6/16 is made up of two little figures lasting 3/16 each.
- So far the music has been played by pianos, a wind instrument and the percussion section. In bar 7 toms and gongs turn up, while towards the end of this piece the strings and brass section enter the picture. So "I'm stealing the towels" begins chamber-music-like, but ends orchestrally. Yet again the meter changed to a bar lasting 2/4 (one might also choose for 4/8 or 8/16).
- Bars 8-9 feature the choir, singing in 4/4. They are singing "200 motels" three times, harmonized differently, while the Jeff figure joins in saying "I'm stealing the towels". The example from above contains the first harmonization. You've got an individual alt and soprano in the foreground (staff 1). The remainder of the choir is singing in the background. Straight from CD it's very difficult to exactly hear what notes they are singing, so I've put their part in staff 2 between brackets. It corresponds with bars 29-30 from the chorus part below, the way it was handed over to the choir. Because of the persistence of version differences, I'm trying to transcribe such bars from the album nevertheless.

"I'M STEALING THE ROOM"

$\downarrow = 88$ FAST

MOD/HARD STICKS

PERC II

PERC I

PERC III

WOOD WIND

MED/HARD STICKS

SOFT

11 5 9 16 16

The image shows a handwritten musical score for the piece "I'M STEALING THE ROOM". The title is written in large, bold, black letters at the top. Below the title, the tempo is marked "FAST" with a metronome marking of 88. The score is written on three staves. The top staff is for Percussion II, the middle for Percussion I, and the bottom for Percussion III. The score includes various musical notations such as notes, rests, and dynamic markings like "ff" and "p". There are also handwritten annotations like "MOD/HARD STICKS" and "WOOD WIND". The score is divided into measures, with bar numbers 11, 5, 9, 16, and 16 written below the staves.

Head of bars 1-3 with piano and percussion staves (original score in Zappa's handwriting).

The image shows a handwritten musical score for the chorus of "I'm Stealing the Room". The score is divided into several systems:

- System 1:** Labeled "CHORUS" and "I'M STEALING THE ROOM." It features a tempo marking "FAST" and a metronome marking "♩ = 88". The time signature is 11/16. The piano part has a large "2" written below the staff. The percussion part has a large "2" written below the staff.
- System 2:** Labeled "A LITTLE SLOWER". It features a tempo marking "♩ = 80". The time signature is 3/16. The piano part has a large "2" written below the staff. The percussion part has a large "2" written below the staff. There is a bracketed annotation "[DINNER GONG]" above the staff.
- System 3:** Labeled "A". It features a tempo marking "A LITTLE SLOWER". The time signature is 3/16. The piano part has a large "4" written below the staff. The percussion part has a large "4" written below the staff. There is a bracketed annotation "[GONG]" above the staff.
- System 4:** Labeled "S.", "A.", "T.", and "B.". It features a tempo marking "A LITTLE SLOWER". The time signature is 3/16. The piano part has a large "4" written below the staff. The percussion part has a large "4" written below the staff. There is a bracketed annotation "[GONG]" above the staff. The lyrics "TWO HUNDRED MO-TELS" are written below the staff.

Page 1 of the chorus part in the handwriting of a copyist.

B) "Dental hygiene dilemma".

A thumbnail of the orchestra sheet with the first four bars from "Dental hygiene dilemma" can be found in

the CD booklet with the 1971 version, next to three other samples. They are small images, barely legible at sight, but their resolution is good enough to follow most of it when you magnify them.

Handwritten musical score for "Dental hygiene dilemma (album version), opening". The score is written on multiple staves for various instruments and includes lyrics. The top section shows the vocal line with lyrics "Hen-min-tun--" and "No, ho, no--". Below are staves for Cellos, Eva Piano/Celeste, and Violins. The bottom section shows a vocal line with lyrics "Man, this stuff is great. It's just as if-Do-no-van-him-self had ap-peared on my very own TV with words of piece- Love and external eos-mic wis-dom--". Below this are staves for Cello, Piano/Celeste, Piccolos, and Woodwinds. The score includes dynamic markings like "mf", "mp", and "f", and performance instructions like "No meter".

Dental hygiene dilemma (album version), opening. Transcription: KS (by approximation; some elements could be taken over from the CD booklet).

Update winter 2015 (deposited at the I-depot, The Hague).

The album version is not bright enough to be positive about every note in the transcription above. Still it can be observed that, again due to the limited rehearsal time, concessions to the score were made:

- Bars 1: Opening motif. This motif by itself could be interpreted as diatonic, if it weren't for the other parts visible in the score. The whole is atonal. The score starts on A and the transcription on Bb, so the track must have been sped up. The Jeff character sings along with the line for the cellos instead of using spoken language, as prescribed in the score. This is another change that must have been made on the spot.
- Bar 2: Strings of 16th notes, in the shape of quintuplets. Zappa scored this out in detail for a celeste, piano and harp. All three are playing up- and downwards, but not in the same manner. On album this got simplified. It looks like an improvised bar with only the rhythm maintained.
- Bars 3-4: Second motif, played twice. Also here the score seems to be played with some liberty.
- Spoken block without a meter. To the right a screenshot of the cartoon figure Jeff with Donovan appearing on his TV during this spoken block.
- Bar 5: Variation upon the opening motif. This time the other parts from the score are better audible, making the atonal character of the composition coming out better.

The "200 Motels" scores need a better recording than the 1971 album. The three more recent performances of "200 Motels, the suites", have ultimately lead to a double CD with the L.A. Philharmonic (released in November 2015). It's recorded under better conditions, regarding accuracy but mostly regarding sound quality. In 1971 Zappa wanted the project to succeed one way or the other, so a lot of concessions were made, both to the music and the number of scenes that could be filmed. He also had to deal with extra problems that arose during the shooting of the film. The script deals with all kind of subjects about a band on the road, directly derived from Zappa's own experience. One scene is about the aspirations of bass player Jeff Simmons to start a band of his own. Zappa knew this was on his mind, but it became very real when Jeff Simmons actually did what the song is about: he left the group right before the filming would start. So Zappa had to find another bass player in a rush and for the film this Jeff Simmons scene got replaced by a cartoon episode.

C) "Does this kind of life look interesting to you?"

A thumbnail of the coda is included in the CD booklet of the 1971 version. It's also included as a bonus track in the "Greggery peccary & other persuasions" CD by the Ensemble Modern from 2003. This piece is made up of three blocks:

- 0:00 "Does this kind of life look interesting to you?": spoken text over an elaborate vamp.
- 0:42 "200 Motels": variations upon the material from "I'm stealing the towels" (see above).
- 1:13 "I'm stealing the room": this part is what Zappa refers to as the coda. Since it takes up half of this piece, it must be the coda of the Suites, mvt. 10, rather than this track alone. Because the suites version didn't exist on record yet, Zappa had no alternative for calling it the coda of "Does this kind of life look interesting to you?" in the CD booklet. The three bars from the booklet are played between 1:13 and 1:24.
- 2:59 End.

The "200 Motels" score isn't available for the public, but these thumbnails, the Songbook examples and the circulating copies give a good idea of how Zappa composed on paper. His written scores can be pretty dense and detailed, possibly too demanding. In this case the rhythm of the parts overlaps, but their lines are mostly different. You're getting at dense atonal harmonies. See also the opening from "Mo 'n Herb's vacation" and the first "The perfect stranger" example from this study for other instances of such dense harmonies. Bar three, with its piano arpeggios, begins with a very broad dissonant cluster. The recording of this track is not bright enough for a good transcription from record, nor is this (magnified) thumbnail entirely legible. Things you can notice:

- The score is generally followed, but much of the details are skipped. The track also got sped up.
- The last eighth note of "room" in bar 1 got extended to a quarter note, before bar 2 sets in.
- The first of the four dissonant chords by the brass in bar 2 got cancelled.

- The text for the Jeff figure has no prescribed pitches, but the sopranos do have them. On the album these sopranos are hardly audible, but the Jeff figure is screaming his line loudly with some very high notes.

♩ CODA 1=63 SUNNER 27

The image displays two pages of handwritten musical notation. The top page is titled "CODA 1=63 SUNNER" and "27". It features a staff for "JEFF" and several vocal staves. The lyrics "I'M STEALING THE ROOM" are written above the vocal staves. The notation includes various musical symbols such as notes, rests, and dynamic markings. The bottom page continues the musical score with more vocal staves and instrumental parts. The lyrics "I'M STEALING THE ROOM" are repeated. The notation is dense and includes many handwritten annotations and markings.

The image shows a handwritten musical score for a band. It consists of two main sections. The upper section is a complex arrangement with multiple staves, likely representing different instruments such as drums, bass, guitar, and keyboards. The notation is dense, featuring various note values, rests, and dynamic markings. The lower section is a single staff with the word "DADDY" written above it in large, bold letters. This section also contains musical notation, including notes and rests, and appears to be a magnification of a specific part of the score.

Does this kind of life look interesting to you?, bars 1-3 of the coda.
Magnification of the thumbnail on page 27 of the original score as reproduced in the CD booklet.

Disc II track 4: Daddy, daddy, daddy

An accessible pop song. In content it's related to the "Do you like me new car" song from "Fillmore East, June 1971". Its general outlines:

- 0:00 intro in F# Mixolydian.
- 0:16 theme 1, continuing in F# Mixolydian.
- 0:31 theme 2 in C# Mixolydian.
- 0:53 theme 1.
- 1:20 theme 3, the "if his dick is a monster" theme, ending with a chord sequence from "Do you like my new car?", as included in the example from the Fillmore East section of this study (bars 6-9).
- 1:36 themes 1 and 2 alternating.
- 2:28 outro as a variation upon the intro.
- 3:11 end.

Disc II track 5: Penis dimension - Suites mvt. 12: Penis dimension

"Penis dimension" is today available in a couple of appearances:

1) The handwritten orchestra score. As you can see, someone other than Zappa has written "concert score" in the above left corner, to avoid the question if for instance the Bb clarinet should be transposed or not. As a concert score it's notated as an untransposed clarinet. You can be positive about this by comparing it to the Songbook (see below). As far as I've seen, Zappa's orchestral scores are mostly notated as concert scores. I can't tell for sure if Zappa used transposed scores in other situations. The Songbook knows two versions of the opening from "Music for low-budget orchestra", one with a Bb clarinet melody as concert score, in combination with a piano part, and one with the Bb clarinet part transposed. "Get whitey" gets transposed too.

This total score contains 196 bars, of which I only got five sample pages, among them the two ending pages with a coda. Four are from an auctioned score, with page 1 presented below. One is publicly available via the CD booklet, being page 6, though only as a thumbnail image. This coda hasn't yet been performed. See the "Penis dimension" paragraph from the just another band from L.A. section of this study for the content of this coda. Possibly there's more unreleased music to it. The example below contains:

- Bar 1-2: the song starts as if in C, the meter being 3/4 with standard on beat notes. The Songbook describes it as a modest waltz and Zappa indicates moderato in the score. Upon C-G (sustained) the following chords are played: Gadd2, Amadd2 and Gadd2.

- Bar 3-4: modulation to C Dorian. Bar 4 has the Cm7add4 chord as total harmony (or Cm11, no 9th). Bar 5 is in parallel octaves with a rhythmically articulated figure using triplets.

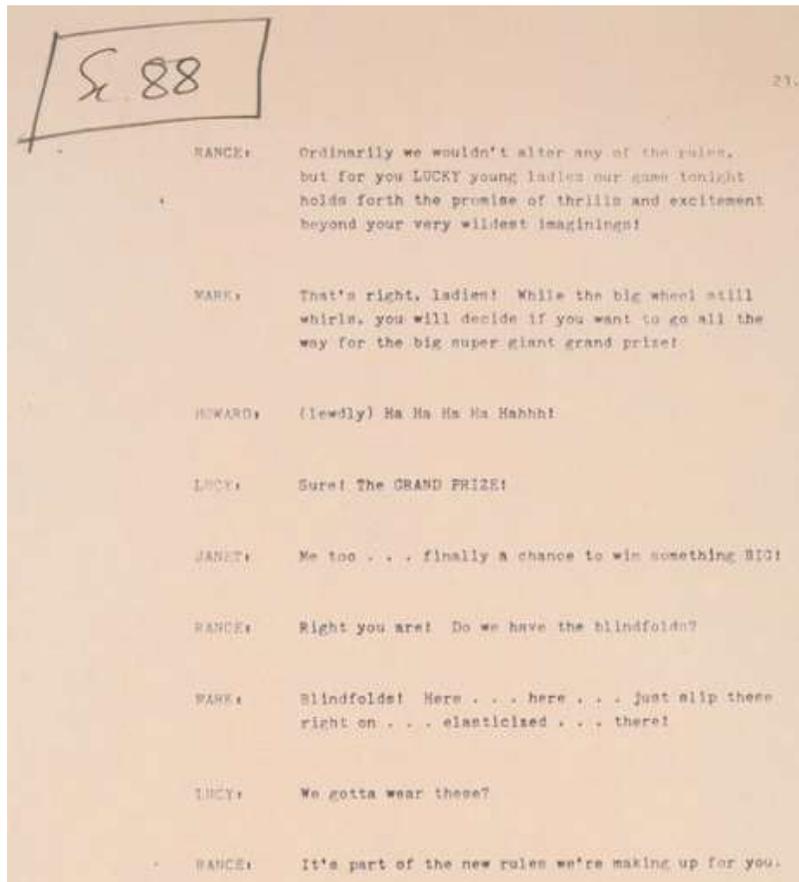
- Bars 5-9 are a variation upon bars 1-4. Bar 5 is a literal repetition of bar 1. Bars 6 and 7 are harmonically different, using Db13 (following Db Lydian without the C) and a chromatic chord upon Gb (Gb,A,C,Eb,F). On beat 3 of bar 7 the piccolo part is a chromatic series of stacked fifths, while the trumpets/VC/CB play Dbmaj7+5. Bars 8-9 aren't shown below. They go like bar 4, largely the same regarding the rhythm, but somewhat different regarding intervals. While bars 1-6 could at least to a point be called diatonic, in bar 7 the atmosphere becomes chromatic. During the next bars 10-15 it's all atonal. See the Penis dimension paragraph from the previous section for these last bars.

2) The performance as included in "200 Motels". As it turned out later, with parts being skipped. Regarding structure, it is following the Songbook.

3) The version from "The suites" lasts the longest on CDs. Compared with the "200 Motels" edition, it has additional texts and material from "Bwana Dik" added to it. But, as said, it's without the coda.

- 4) A piano reduction of the score of "Penis dimension" is included in the Frank Zappa songbook vol. I. The 196 bars from the handwritten score by far exceed the number of 77 bars from the Songbook. See the previous Just another band from L.A. section for bars 1-23 as taken over from the Songbook. That section is about sequences, where it is presented as an example of an atonal sequence. When you compare the Songbook with the original score, it comes out that it's not only reduced. A number of harmony notes are skipped to ease a performance on piano. The piccolos and trumpets parts of bar 6 got left out altogether. The Songbook is authorized, so these version differences should be taken into consideration. It complicates things for when you would be studying the harmonies of "Penis dimension".
- 5) The 1972 big band performance as on "Wazoo". The "Wazoo" booklet contains an image of the score collection the band used, including "Penis dimension". The Wazoo band was relatively big, but much smaller than the number of players of the orchestra Zappa had in mind when writing the above score. For the 1972 band he wrote out everything (see the next sections for examples). So there must be a second handwritten score by Zappa himself, like the Songbook version being reduced.
- 6) The rock-band version as to be found on "Zappa in New York Deluxe".

Below a sample page of the script, dealing with scene 88, the "wheel of fortune" event. In 1971 much of the script and score couldn't actually get filmed and recorded. "200 Motels, the suites" gave a re-birth to many earlier unreleased sections, but still not all. The mentioned "Penis dimension" coda and the earliest version of "Naval aviation in art", called "Jeff and Don" aren't fully available. See the Perfect stranger section of this study for a sample of the latter composition. It would also be very welcome if the ZFT ever decided to publish the entire script for "200 Motels", in order to get an idea of how it was contemplated when everything could have been shot.



Disc II track 6: What will this evening bring me this morning

Another pop song from the 1971 album. I'm dealing with "What will this evening bring me this morning" in the counterpoint part 1 section from this study. It's an example of Zappa applying classical counterpoint, here in the shape of a canon. It's also an example of a Zappa song with an explicit emotional recognizability. Its lyrics could only be related to when you're a famous rock artist, but otherwise it's much exhilarant. In some cases one might wonder what could have happened to Zappa songs if the lyrics would have better appealed to the general public. I'm addressing myself to this matter as well in case of "Bobby Brown" (see the Does humor belong to music section).

Disc II tracks 7-14: A nun suit through Courduroy ponce - Suites mvt. 9: The pleated gazelle

Next is an example of an atonal score for choir for "200 Motels", called "A nun suit painted on some old boxes". It's one of the three "200 Motels" scores that got published in the Songbook. First below is the album version, that goes differently from the original handwritten version of the Songbook (secondly below). Zappa could change his scores during rehearsals, as he himself expressed it, "anytime anyplace anyway for no reason at all". The other reason it got changed upon is in all probability the limited rehearsal time. The most notable differences are the absence of various harmony notes and the original sextuplet, that now gets spread out over two bars.

The image shows a handwritten musical score for the opening of "A nun suit painted on some old boxes" from the album version. It consists of two systems of three staves each. The top staff is the vocal line with lyrics: "Why don't you strap on--" and "Ah--". The middle staff is the piano accompaniment. The bottom staff is the bass line. The score includes various musical notations such as notes, rests, accidentals, and dynamic markings. The second system includes the lyrics "Why--" and "Faster".

A nun suit painted on some old boxes (album version), opening. Source/transcription: Songbook (as below)/KS (adaptation to the album version). Update 2007.

Handwritten musical score for the piece "A nun suit painted on some old boxes, opening." The score is written in 4/4 time and consists of three systems of staves. The first system includes a vocal line with lyrics "Why--", a piano line with lyrics "Ham--", and a bass line with lyrics "Why--". The second system continues the vocal line with lyrics "3" and "Why--". The third system shows the continuation of the piano and bass lines. The score features various musical notations, including triplets, sixteenth notes, and rests.

A nun suit painted on some old boxes, opening. Source: Songbook.

Handwritten musical score for "THE PLEATED GAZELLE" (Sc 33). The score is written in 4/4 time and consists of multiple systems of staves. The title "THE PLEATED GAZELLE" is written in large, bold letters. The score includes staves for STRINGS, PIANO, and SOLO VIOLIN. The score is annotated with various markings, including "TEMPI TO BE STRICTLY OBSERVED", "played only once!", "Solo Violin", and "PIANO". The score is numbered "311 BARS TOTAL" at the bottom.

3

Narrator

Handwritten rhythmic notation for the Narrator part, including notes with 'x' marks above them and a bar line.

I went back to my hotel, by myself

normal I made some

Violins section with two staves. Includes markings for *pizz.*, *mp*, and triplets. The second measure contains the lyrics "I made some".

Violas section with two staves. Includes markings for *pp-p* and triplets.

Celli section with three staves. Includes markings for *As staff 6* and triplets.

Two staves of music, likely for a string quartet or similar ensemble, with various note values and slurs.

Bass section with one staff. Includes markings for *Evab* and *mp*.

Piano section with two staves. Includes markings for *As bar 1*, *Evab*, and *mp*.

Narrator

coffee, and took out the mu- sic I'd been working on,

Violins

Bass

Piano

Swab. →

mp

pp

Slower Narrator

a piece, for voice, and..

Violins

Bass

Piano

Swab. →

mp

pp

Previous pages: The pleated gazelle, bars 1-7. Source/transcription:

- bars 1-4: original 1971 score (see the thumbnail in this page).
- bars 1-4: the pitches and rhythm of the spoken text is following the suites version (transcribed by KS).
- bars 5-7: transcribed from the suites CD by KS.

Update Spring 2016, deposited at the I-depot, The Hague.

1

Narrator

The musical score is handwritten and consists of five staves. The top staff is for the Narrator, with a treble clef and a key signature of one sharp (F#). It is marked 'Astheprevious' and 'mf example'. The second staff is for Strings, with a treble clef and a key signature of one sharp. It includes markings for 'pizz.' and 'normal'. The third staff is for Horn, with a treble clef and a key signature of one sharp. It is marked 'pp'. The fourth staff is for Piano, with a treble clef and a key signature of one sharp. It is marked 'mf' and 'Astheprevious example'. The fifth staff is for Harp, with a treble clef and a key signature of one sharp. It is marked 'H'. The score includes various musical notations such as triplets, slurs, and dynamic markings.

The pleated gazelle, bars 1-4, the suites version. Transcription: KS (update Spring 2016, deposited at the I-depot, The Hague).

"Nun suit" is part of a series of compositions for choir and orchestra to be found on what used to be side four of the original double album. The series is titled "The pleated gazelle" (above are two sample images of an auctioned copy). Among others it includes the 1971 album tracks:

- "A nun suit painted on some old boxes".
- "Motorhead's midnight ranch".
- "Dew on the newts we got".
- "The lad searches the night for his newts".
- "The girl wants to fix him some broth".
- "The girl's dream".
- "Little green scratchy sweaters & courduroy ponce".

This album sequence is different from the suites version and a pop song, called "Magic fingers", got added to it (see below at track 20). "The pleated gazelle" from the suites has a lot more to it. About ten of the 21 minutes aren't on the album. Among the sections unavailable on the 1971 album is the whole opening block of seven minutes.

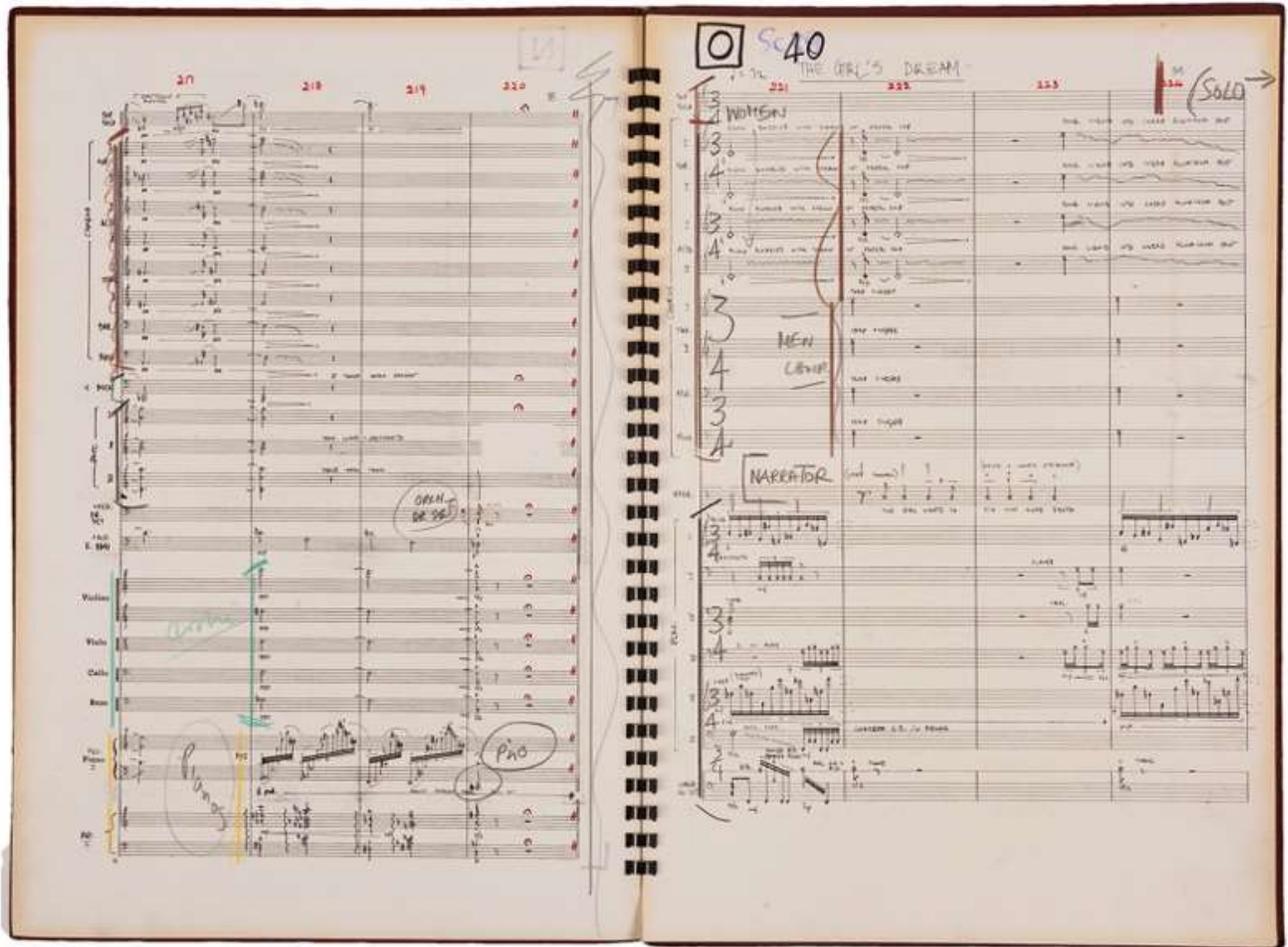
The above opening block of "The pleated gazelle" is made up of a series of atonal miniatures, with a narrator telling a story either along with it, or between the miniatures. It is one of the rare occasions where the I-figure is not Zappa impersonating somebody. It is actually is about the real himself, starting to write music after a concert. Bars 1-4 are the first miniature. It is played over an A pedal with four repeated piano chords per bar. The chords for the string section are dense and clustered. The violincelli part gets spread out over twelve individual players. The first six are playing pizzicato notes. Chords of three notes at first and a second cluster at the end in bar 4. The first six (staves 8-9) are playing a clustered block of stacked minor seconds. The violas get divided into four groups and the violins into eight. The whole becomes a torpid atonal mass of notes. It can be easily seen in the score how the components of this mass are moving up and down via mostly triplets. Above, with the "Can I help you with this dummy?" example, I've shown that the suites are a revised version of the 1971 score, at least for some of its movements. In this case the revision meant a strong reduction of the notes to be played. A few ornamental notes got added as well. The majority however got skipped and as a consequence the character of these bars changed drastically. Instead of featuring dissonant clusters we're getting at a light transparent miniature, where during bars 1-4 the spoken text stand central. Zappa notates these spoken lyrics as plain text within the bars the words get pronounced, or - when there is no accompaniment - in an empty bar or space behind a bar. I've written out the pitches and rhythm from the suites version to be able to include it in the on-line midi file. With bars 5-7 the next atonal miniature starts. It features a series of piano chords played over sustained notes by the string section. The sample pages I encountered on internet included bars 1-4 and bars 27-40, so I can't tell if there are differences between the 1971 and the suites version for these bars. Bars 27-40 are again atonal miniatures and yet again stylistically much different from the previous example. It features a difficult soprano part with the chorus snapping their fingers as well as chords and counterpoint lines by a few instruments. Thus not as dense as bars 1-4. It gets interrupted twice by the narrator telling his story unaccompanied.

"The pleated gazelle" is a collage piece, mostly made up of atonal music for chamber orchestra and choir. It has a little story to it about a girl falling in love with a newt rancher, having to cope with his affection for his vacuum cleaner. It's being explained by a narrator. The fact that Zappa could record and film far from all he had planned went to the detriment of the coherence of the movie. This specifically goes for "The pleated gazelle", a series of scenes by itself, not particularly related to the remainder of the movie. Above and to the left you can see that this composition had a score of its own, thus not incorporated into the two "200 Motels" volumes of the conductor score (see the bottom of this section). "The lad searches the night for his newts" carries scene letter J, while scene J from "200 Motels" is part of "Centerville" (see above). The vacuum cleaner and newts were also puppet characters played by actors during the movie, so something had to be done with it, but the plot of the story went lost. The here reproduced sample image from "The lad searches the night for his newts" is the narrator part, indicating when to pronounce his spoken line in a 4/4 environment. Otherwise the narrator isn't involved in this track.

The image shows a handwritten musical score on a page titled "THE LAD SEARCHES THE NIGHT". The score is written on three staves. The top staff is labeled with a large "8" and "214" in the left margin. The title "THE LAD SEARCHES THE NIGHT" is written across the top of the staves. The first staff contains a series of notes with a circled "3" above them, and the text "The lad searches the night for his newts" written below the notes. The second staff is labeled "150" in the left margin and contains the word "TACET AL" written across the staff. The third staff is labeled "207" in the left margin and contains a circled "6" and the text "SPEECH (Narr)" written across the staff. The score is written in a clear, legible hand.

Dew on the newts we got, 0:33-0:44. Transcription: KS. Update winter 2018 (deposited at the I-depot, The Hague).

The tracks on the "200 Motels" CD are outtakes in a following order different from the piece as a whole, as played on "The suites". The little example from above is a fragment from "Dew on the newts we got". It contains four bars for the soprano section of the choir, with some instrumental accompaniment and, if I'm hearing it correctly, one or a few notes by the tenors. It's transcribed from the "200 Motels" CD. It has different meters, following the lengths of the sentences. The last bar in 11/8, ending with sustained notes, may very well have been notated differently in the original score.



Sample from the "Pleated gazelle" score, as auctioned at Heritage.com. It can be heard on "The suites" CD between 12:18 and 12:36. The left page is the end of "The lad searches the night for his newts" section with arpeggio chords and 16-nd note strings for the pianos in 3/4 (The suites version). The right page is the opening of the "The girl's dream" block, with the narrator saying "The girl wants to fix him some broth". The image is too small to make it legible. What you can recognize is that, next to the narrator, there are chorus parts (skipped on the CDs, both the 1971 and 2015 issues) and percussion instruments playing 11-tuplets over 3/4. On the 1971 CD this is a separate track, called "The girl wants to fix him some broth". It gets followed by the "tinsel cock" part on the next page.

The next example contains the five final bars from "The girl's dream" and the first five bars from "Little green scratchy sweaters". Both pieces are atonal. Regarding their compositional style these two sections are opposites. "The girl's dream" ends deliberately irregular. It contains spoken parts, sung parts, high whistling, a guitar chord and four bassoon parts. These bassoon parts follow their own lines. They have some regularity by themselves, but these parts as a group are melodically and rhythmically unrelated. Zappa specifically wrote it in a manner that the rhythms don't coincide, creating some sort of a deliberate cacophony. Such examples are rare (bar 97 from "The girl in the magnesium dress" is another example in this study). To play it literally in this manner would have cost rehearsal time. On album we have yet another example how the scores were changed during the recording sessions, in this case rather drastically:

- All four bassoon parts got skipped. They are replaced by improvised notes by two bassoons, a flute and one of the guitars.
- The soprano does not follow the prescribed melody literally, but is improvising as well.

- The chorus in bar 4 only follows the prescribed rhythm, not the pitches.

The image shows a handwritten musical score for the piece "The girl's dream". The score is organized into several sections:

- Vocals:** Includes parts for Soprano, Tenors, and Basses. The Soprano part starts with "Highwhistling" and features a melodic line with triplets and a fermata. The Tenors and Basses have lyrics: "The girl--", "whisperis", and "Na--".
- Narrator:** A part with lyrics: "The girls, in - a - state - ment to the press, ex - plains -".
- Guitars:** Two staves showing rhythmic accompaniment with triplets and various articulations.
- Flute:** A part with a melodic line and a triplet.
- Bassoons:** A part with a melodic line and a triplet.

The score is written in 4/4 time and includes various dynamic markings such as *mf*, *mp*, *p*, and *pp*. There are also performance instructions like "Highwhistling" and "whisperis".

The girl's dream (album version), end. Transcription/source: KS (album improvisations)/Songbook (main elements).

Update winter 2015 (deposited at the I-depot, The Hague).

This image shows a single staff of handwritten musical notation. It begins with a treble clef and a key signature of one sharp (F#). The notation includes several measures with eighth and sixteenth notes, some with slurs and accents. A dynamic marking of *mp* is present. At the end of the staff, there is a fermata over a final note. A small instruction "VIBRATE THROAT WITH EACH MEASURE" is written above the first few notes.

The girl's dream, end, soprano part from the score.

Handwritten musical score for soprano part. The notation includes notes on a five-line staff with various dynamics and articulations. Above the staff, the instruction "TRANDULANT FAULTIVE EFFECT" is written twice. Below the staff, there are rhythmic markings: "D-D-D-DUHHH" and "D-D-D-DUHHH".

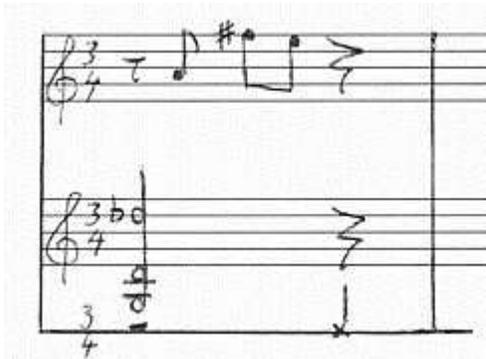
The girl's dream, end, chorus part from the score.

Handwritten musical score for chorus part. It consists of four staves (I, II, III, and Bass). The notation is complex, featuring many notes, rests, and dynamic markings such as f , mp , mf , and ff . There are also triplets and other rhythmic groupings indicated by brackets and numbers.

The girl's dream, end, bassoon parts from the score.

Handwritten musical score for bassoon parts. It includes staves for Soprano, Chorus, Trumpets, and Violins. The Soprano part has a treble clef and a 3/4 time signature. The Chorus part has a bass clef and a 3/4 time signature. The Trumpets part has a treble clef and a 3/4 time signature. The Violins part has two staves with treble clefs and a 3/4 time signature. There are performance instructions such as "Stamp/clap" and "Stamp/clap" with a 3/4 time signature. The notation includes notes, rests, and dynamic markings.

Little green scratchy sweaters & courduroy ponce, opening. Source: Songbook (bar 4 adapted to the album version by KS). Update winter 2015.



Little green scratchy sweaters & courduroy ponce, rhythm of bar 4 as prescribed in the score.

"Little green scratchy sweaters & courduroy ponce" segues upon "The girl's dream" in a much different style. The example above shows the start of this piece in 3/4, after which it continues in 5/8. The irregularity of the "The girl's dream" is gone: both the chorus and the instrumental parts neatly complement the soprano lead melody with harmonies, while all parts are basically following the same rhythm. Strong dissonances are avoided. The score and the album version are mostly the same, though some notes aren't clearly audible. The main difference must have been made by Zappa himself on the spot, namely the rhythm of bar 4. Performing difficulties can't have been the reason. Bar 4, as prescribed, is easy to perform, and the album version is a little more complicated. The example above contains the first three phrases of the soprano part:

Bars 1-2: phrase 1. The chorus sings Cmaj7 (no 3rd) all through bar 1, followed by Ab-Eb-D (Ab 11th) in bar 2. The trumpets accompany the soprano lead melody via parallel thirds, of which the higher note is identical to the sung melody.

Bars 3-4: phrase 2, a variation upon phrase 1. Phrase 1 gets reiterated a minor second lower. The rhythm goes much different. Compared to bar 2, two extra notes are added in in bar 4, before the soprano gets at E. The chorus sings Bm#7 in bar 3 and the trumpets are playing parallel thirds again. The combination of the soprano and harmony notes in bar 4 is such, that it's largely consonant. Only one major 7th interval, D-C#, causes some sharper dissonance. For the rhythm of bar 4 Zappa decided for an acceleration: a normal eight note got replaced by an eighth note in triplet time. The bar in total lasts about an eighth note longer because there is some pausing at the end. See the "This town is a sealed tuna sandwich" example from the *Orchestral favorites* section for another example of changes, that probably were also made on the spot.

Bars 5-6: phrase 3, a character variation: only the upward going chromatic line resembles the previous two phrases. Again there are no dissonances till we get at the final chord. In this last chord we get at two minor seconds dissonances between the parts: F-F# and A-A#.

Disc II track 15: Strictly genteel (the finale) - Suites mvt. 13: Strictly genteel

This finale for "200 Motels" is the part Zappa returned to the most. Not only does it re-appear on Studio Tan and the L.S.O. CDs for orchestra only, two live versions by his rock band can be found on "YCDTOSA vol. VI" and "Make a jazz noise here". In this study I've included five examples from "Strictly genteel" in the London Symphony Orchestra section. The "200 Motels" version of "Strictly genteel" is much more extensive than the later versions:

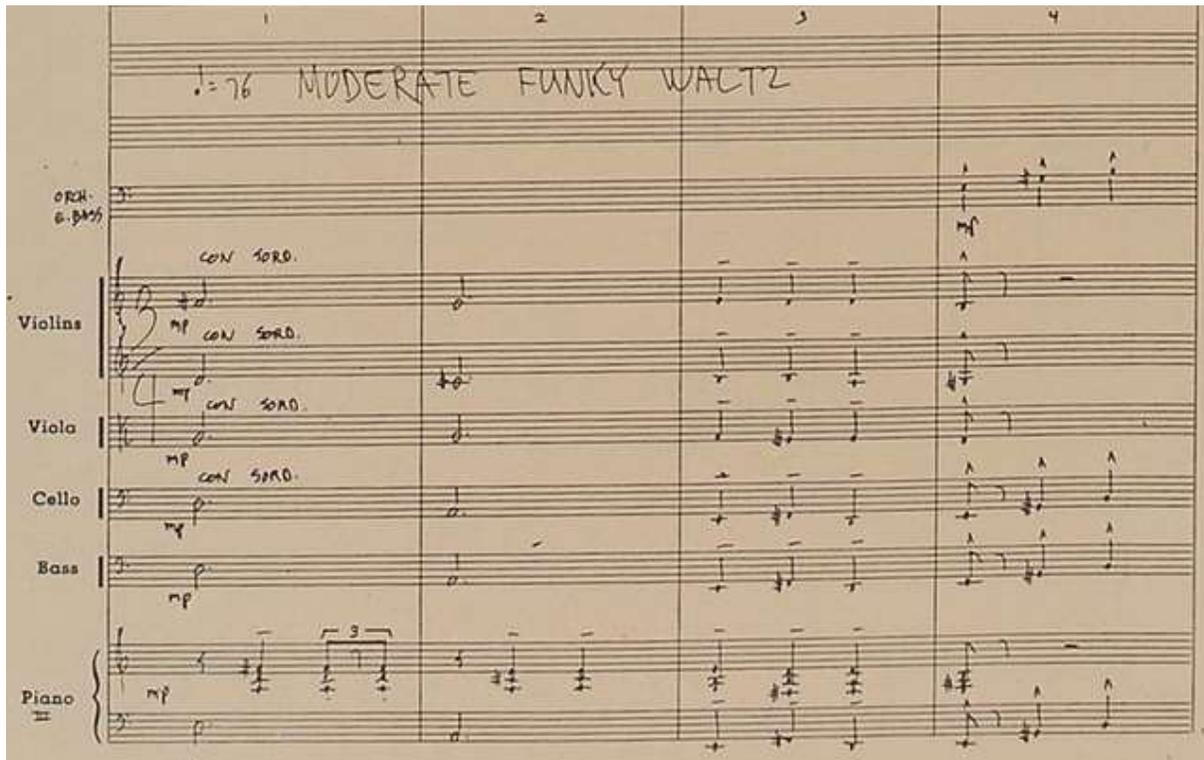
- 0:00 Spoken intro.

- 0:30 "Strictly genteel" as played on for instance the L.S.O., here with lyrics (orchestra and choir).

The score sample from the CD booklet can be heard between 1:58 and 2:06, at this point referred to as the "Every poor soul who's adrift in the storm" part from the finale.

- 6:20 "We're gonna clear out the studio ...", rock music by the band.

- 9:53 "He's making me do this ...", an atonal cacophony as outro.
- 11:10 End.



Bars 1-4 from "Strictly genteel" in Zappa's 1971 handwriting, calling it a funky waltz.



The set for the chorus with the Finale/Strictly genteel to the left (handwriting of a copyist).

Disc II tracks 16-20: Promotional radio-spots and Magic fingers

As a United Artists production, the "200 Motels" album wasn't part of the agreement Zappa reached with Warner Bros. in 1982. At that time the album was still available, but the latest pressings had become terrible. It took a while to get "200 Motels" re-released on CD. As a bonus for the re-release four promotional radio spots and the single edit of "Magic fingers" got added. To the right Zappa playing his guitar solo during this song. His own part during the film is limited, being some cameo appearances as musician and director. The Zappa character from the script, all parts with texts, were played by Ringo Starr, dressed up as Zappa. The overall set-up of "Magic fingers":

0:00 Main body with two alternating themes.

1:22 Guitar solo in A Dorian over an A pedal note.

2:19 Interlude.

2:30 Coda with a repeated third theme.

2:53 Surrealistic epilogue with sexual fantasies (track 8), left out on the single edit (track 20).

3:52 End.

①

mf Ooh—the way you—
(With vibrato)
mf
mf
Vib. mf

②

O—pen up—
p mp
p
Vib.

Magic fingers, 0:13-0:34. Transcription: KS. Update Spring 2018 (deposited at the I-depot, The Hague).
Basic sung lead melody by W. Ludwig.

The example above contains the two central themes:

- Bars 1-4: phrase one of theme one with a chord progression, being I 7th-III-II in A Dorian. In bar 1 the additional D extends the first chord to I 11th.
- Bars 5-8: phrase two, a diatonic sequence. Its motif is a group of four notes, turning up four times. The sequence takes the second note of a motif as the starting point for the next motif. The sequence neatly alternates major seconds and minor thirds. In this case this can be done in total within the Dorian scale, thus without touching upon other scales.
- Bars 9-13: phrase one of theme two. Everybody is singing and playing parallel with some chromatic passing notes turning up. Till bar 11 the rhythm is very even with strings of eighth notes standing central. Zappa craving for rhythmic variation gets commented upon in the Roxy and elsewhere and In New York sections of this study. One would rather think of an example with wild irregular groupings to demonstrate this, as they indeed occur in his music. Flipside of this search for variation is that it also comprehends doing what's perfectly normal or even simple, like the even ticking of eighth notes. At bar 12 you're getting at notes between beats.
- Bars 14-15: phrase two, a mini guitar solo of three bars over an A pedal note.

In pop music people focus on the currently popular artists and the attention Zappa is getting is a bit waning. Classical music is for posterity and it's good to see that from this angle Zappa keeps being performed. I think his best chances lie in this direction and in my opinion at least part of Zappa's pop albums also deserve to be interpreted as classic, not just in the context of pop music. Pieces as "Drowning witch" and "It must be a camel" are classic in every sense. I also hope the policies of the ZFT become less severe as it comes to conditions for performing Zappa.

Below a review of "200 Motels, the Suites", showing the ongoing interest in Zappa's (classic) music. It's from the Volkskrant, January 20th 2016, written by Frits van der Waa. I'm including it here, because, as a Dutch newspaper, you're unlikely to find this one on-line, and I like the way it's written: "45 years ago, when he was 30 years of age, Frank Zappa went into a London filmstudio, together with his Mothers of Invention, a complete choir and the Royal Philharmonic Orchestra. *200 Motels*, about a rock band on tour, would become his most ambitious project of his life. The resulting movie was disorderly. The accompanying double album a bit of everything, but with Zappa's mark all over it, him being the master of

musical collages. The *200 Motels, the Suites* concert version, that was constructed after his death [KS: by FZ himself], got premiered during the Holland Festival 2000. Only some obscure copies of that performance circulate on internet. Now we finally have an official registration, by the Los Angeles Philharmonic with Esa-Pekka Salonen as conductor and a wide range of vocalists. It's not easy music: Zappa let his erratic imagination run free uninhibitedly. This suite version has little to do with pop music, rather with Stravinsky and Varèse, but also these two almost disappear in this exuberant crossroad of changing directions, that's even more also full of cartoon-like monologues and dialogues. The balance of this live-recording isn't ideal. But in between this debris, you'll find diamonds glittering and other exciting material, that didn't make it to the original album. Zappa was a genius, though not always self-critical. It's a pity forever he couldn't continue this intriguing direction his work took because of his early death."



KLASSIEK *****

FRANK ZAPPA: 200 MOTELS

ROYAL PHILHARMONIC ORCHESTRA
Zappa Records (2 cd's)

45 jaar geleden ging de toen 30-jarige Frank Zappa een week lang een Londense filmstudio in, samen met zijn Mothers of Invention, een compleet koor en het Royal Philharmonic Orchestra.

200 Motels, over het leven van een rockband op tournee, zou het meest ambitieuze project van zijn leven worden. De resulterende film was een rommeltje. De bijbehorende dubbel-*lp* bleek een lappendeken - maar dan wel een waar Zappa, de meester van de muzikale collage, stevig zijn stempel op gezet had.

De postuum samengestelde concertversie *200 Motels - the suites* beleefde zijn première in het Holland Festival 2000. Van die uitvoering resteert alleen een in internetuithoeken circulerende opname. Maar nu is er dan eindelijk een officiële registratie, door het Los Angeles Philharmonic met dirigent Esa-Pekka Salonen en

een hele cast aan vocalisten.

Makkelijke muziek is het niet: Zappa heeft zijn grillige verbeelding ongeremd de loop gelaten. Met popmuziek heeft deze suiteversie niet heel veel te maken, eerder met Stravinsky en Varèse, maar ook die verdwijnen welhaast in de exuberante maar van de hak op de tak springende kruispuntmuziek, die ook nog eens doorspekt is met cartoonachtige mono- en dialogen.

Ook is de balans van de liveregistratie niet helemaal ideaal. Maar tussen het gruis schitteren veel diamantjes - en bovendien allerlei vaak spannende stukken, die de oorspronkelijke plaat niet hebben gehaald. Zappa was een genie, al was hij niet altijd even kritisch op zichzelf. Het blijft eeuwig jammer dat hij door zijn vroege dood deze intrigerende lijn in zijn werk niet heeft kunnen doortrekken. **FvdW**

Jazz (1972)

Confined to a wheelchair, Zappa composed on paper with an unprecedented pace. He returned to the idea of recording a sequel to Hot rats. The recording sessions resulted in enough material for two albums, Waka/Jawaka and The grand wazoo. A small tour with this band got planned. The first part involved a big band, the second part - due to contractual obligations of some members - a smaller combo. Strangely enough Zappa himself released nothing from these live shows. This conspicuous gap was filled by The Zappa family trust (ZFT), governing his tape archive since 1993. Three CDs could be compiled from these concerts, Imaginary diseases, Wazoo and Little dots.

WAKA/JAWAKA: THE JAZZ COMBO

Confined to a wheelchair at the beginning of 1972, Zappa returned to the idea of composing jazz music, that had worked out well on "Hot Rats". Meanwhile Flo and Eddie, with no new projects announced for them, left the group and started touring on their own. In the summer of 1972, as a sequel upon "Hot Rats", "Waka/Jawaka" was released first, to be followed by "The Grand Wazoo" at the end of this year. At this time Zappa worked with trained session musicians, who could read sheet music. The members of the band were given a book, being a set of a dozen of scores of the pieces they were expected to play. See fig. E from the booklet that comes along with the 2007 "Wazoo" release by the ZFT. Relatively much handwritten sheet music by Zappa himself from this period is circulating. There are a couple of samples and thumbnails from the original scores included in this section and the following two. Apart from that Wolfgang Ludwig has transcribed much of the composed lead melodies from Zappa's jazz music in his study, using them frequently for his analysis.

1. Big swiftly

"Big swiftly" wasn't a large composition from the start. On the "Joe's Damage" CD by the ZFT its opening themes are played in combination with "The new brown clouds", lasting 2:44 in total (see below at "Frog song" for some more about this CD). "Big swiftly" eventually became big by adding an outchorus and a lot of improvisations. All opening themes from this composition, their structure and coherence get a lot of attention in the Ludwig study. An official arrangement by Jon Nelson is on the Barfko Swill list from the ZFT site (available for rent only). Several points taken from Ludwig's analysis of "Big swiftly" are presented below, concerning for instance the use of meters and rhythms. Roughly this title can be subdivided into six sections:

Opening themes.

- 0:00 Themes 1-2.

Changes of meters as well as tempo changes are characteristic of the opening block. Given here are the first two themes that are using a 7/8 and 3/4 alternation. The Ludwig study, pages 92-97, gives an overview of all meters used and an explanation how Zappa could use meters and thematic/motif variations as a way of structuring a song. On top of that you've got tempo changes. Zappa himself writes in the "Wazoo" booklet: "This piece (which comprises all of side one of the Hot rats-Waka/Jawaka album) presents a theme in rapidly alternating time signatures, a few solos, and an outchorus done up in a sort of Prom Night orchestration which suspends the opening rhythmic structure over a straight 4/4 accompaniment." The two opening bars below are built around an F#-G movement, by itself suggesting the key of F# Phrygian. The descant of the piano part also begins with a I-II alternation in this key, while the bass points more at E Dorian with the I chord. With the melody ending on E for the first two themes the general key tends more towards E Dorian. The outro part below is also in E Dorian.



Big Swifty, first two themes of the opening. Transcr. W. Ludwig (1992).

Piano

BIG SWIFTY PART 5

9 10 11 12 13

14 15 16 17-18 19-20

25

Big Swifty, piano part. First page of the original score.

Whereas the CD executions on "Waka/Jawaka" and "Make a jazz noise here" of this song could serve as an example of a melody that's played as a single melody or in parallels, the piano part for this composition shines a different light upon its construction. I only encountered it on the net around 2010. This piano part hasn't been actually used in any "Big swifty" performance, also not in the two versions on the ZFT releases. It's in Zappa's own handwriting and shows that at least at one point he had a harmonized version of "Big swifty" in mind. It changes the character of this piece significantly, making it move from jazz to modern music. The descant chords, apart from the arpeggios, form a normal 5th chords progression. The bass chords, however, are adding extra notes not being part of these 5th chords, so the whole becomes a progression of enlarged chords. Most of the time relatively consonant, but in bars 9-10 and 13-14 the juxtaposition of F# and G in the bass make it dissonant. It's a further example that shows that Zappa's original scores often don't correspond one on one with what's on record. They can be different versions by themselves as well. It's also known that Zappa tried out his players to find out what they could maximally do and by doing so he also presented them compositions that crossed the line of what's doable. So there must be sheets with music that never has been performed at all and that could theoretically be premiered today via digital executions.

43 *Tempo II* ♩ = 138

47 *Tempo I*

54 *Tempo III* ♩ = 132

61

66

Big Swifty, themes 4-6. Transcr. W. Ludwig (1992).

- 0:23 Theme 3 in 5/8 and 3/4.
- 0:38 Theme 4 in 4/4 (bars 43-46 in the second example below).
- 0:45 Theme 5 in 3/8, 6/8 and 5/8 (bars 47-56).
- 0:52 Theme 6 in 4/4 (from bar 57 onwards).

Free improvisation block #1.

- 1:12 Band members are playing at lib. over an F pedal.

Solos, block #1.

- 2:10 Soloing over a I-II alternation in E Phrygian. The solo begins with George Duke on keyboard, next Sal Marquez takes over on trumpet, followed by Zappa on guitar. George and Sal continue soloing in the background when Frank is playing, to a degree becoming a trio. In his response to me Brett Clement names the scale in this part the E Phrygian dominant scale (E-F-G#-A-B-C-D). This Phrygian variant does occur in this block, especially during the keyboard part (e.g. between 2:33-2:42). Mostly it's standard Phrygian as in the example below.

The image shows a musical score for a guitar solo. It consists of two systems of staves. The first system (bars 1-4) shows the guitar part with an 8va trill and a series of five eighth notes on the fifth fret. The second system (bars 5-8) shows the guitar part with an 8va trill, a triplet of eighth notes, and a triplet of eighth notes with a 7 8 fingering. The other instruments (Trumpet, Keyboard, Bass) are shown in the background.

Big Swifty, solo, 5:48-6:04. Transcription: KS (update Summer 2019, deposited at the I-depot, The Hague).

- 8:12 Transition. Zappa is improvising and varying some motifs. Tony Duran joins in on slide guitar, responding to these motifs.

Solos, block #2.

- 9:27 Second block with both guitars soloing. Both E Mixolydian and E Dorian are coming by. The following is an outtake from the section in E Mixolydian with Tony and Frank playing some sort of a duet on guitars. George Duke plays the keyboard part and Alex Dmochowski bass. The latter credited as "Erroneous".

Big Swifty, solo, 9:42-9:57. Transcription: KS (update Summer 2019, deposited at the I-depot, The Hague).

The sustained notes from staff 1 are played with vibrato.

- 11:43 Transition with some more improvising and varying of motifs.

Outchorus.

- 13:17 The outchorus begins with varying material from the opening in slower tempo and a different meter, now standard 4/4. The scheme from below points at returning motifs during themes 1-3 and 5 from the opening, being transposed and occasionally lightly varied upon. These relationships build a coherence between these themes. Theme 4 however, stands by itself, using only B-C#-D as notes.

Thema 1

Thema 2

Thema 3

Thema 5

Big Swifty, thematic relationships. Ludwig study, page 95.

Outchorus
 Tempo III (Orientierung an Ba3 v. Schlagzeug) 3

Big Swifty, opening of the outchorus. Ludwig study, page 239.

Included in this last example are the opening bars from the outchorus where you can recognize three variations upon theme 1 from above. Theme 1 knows to phrases and you can see that material from both phrases re-appears in these variations. The next example below begins with a variation upon theme 2.

- 13:39 During the outchorus a simultaneous use a two different tempi occurs, beginning at 13:40. While the drummer keeps beating the tempo from the beginning of the outchorus, followed freely by the bass guitar, the brass holds back at a 2:3 tempo. The two tempi cause some polyrhythmic interaction between the brass and the rhythm section.

Big Swifty, fragment of the outchorus, notation via syncopes. Transcription: W. Ludwig (1992)/KS (2nd printed edition).

Big Swifty, fragment of the outchorus, original Ludwig 2:3 notation. Transcription: W. Ludwig/KS.

The transcription above contains two notational variants. As mentioned above Zappa talks about a Prom Night arrangement. He further mentions that for this outchorus a "rhythmically deranged" guitar solo was also made use of, a solo that trumpet player Sal Marquez had transcribed and that should be present on the "Waka/Jawaka" album. So far I haven't been able to figure this out. Sal heavily contributed to "Big swifty" for taking care of all (overdubbed) brass parts. After a brief fall-out for having dared to ask for an advance, Sal returned in 1973 for the "Overnite sensation" CD. To the right the photo by Emerson-Loew of Sal Marquez from this last CD.

Free improvisation block #2.

- 14:51 Some more rather free improvisations by all band members in E Dorian.
- 17:21 End.

2. Your mouth

Handwritten musical score for the piece "Your mouth". The score is written in B-flat major and 12/8 time. It features four staves: a vocal line, a brass section, a guitar, and a double bass. The vocal line begins with the lyrics "I heard your story...". The brass section provides harmonic support with chords and rhythmic patterns. The guitar part consists of a simple bass line. The double bass part features a more complex rhythmic pattern. The piece concludes with the word "Brabassa" written below the double bass staff.

Handwritten musical score for the piece "Your mouth", continuing from the previous page. It features three staves: brass, guitar, and double bass. The brass section continues with harmonic support. The guitar part features a melodic line with some triplets. The double bass part continues with a rhythmic pattern. The piece concludes with the word "Brabassa" written below the double bass staff.



Your mouth, section. Transcription: KS (update 2007, deposited at the I-depot, The Hague).

"Your mouth" and for instance "For Calvin" from the next "The grand wazoo" album are more stable in the use of their meters. "Your mouth" is in 12/8 and the transcribed part below is in C Dorian. See the next section at "For Calvin" for a comparison of the element of improvisation during these two songs. Other than "For Calvin", "Your mouth" has just the melody prescribed, but this melody lasts all through. All instruments are playing freely around this theme. There's no improvisation block in this song.

Like "Hot rats", "Waka/Jawaka" and "The grand wazoo" are largely instrumental albums. "Your mouth" has lyrics like a regular popsong. The next track only at the beginning, as does "For Calvin", the only track on "The grand wazoo" with lyrics. During the 1972 fall tour with this jazz band, the lyrics were skipped altogether. A couple of tracks did originally or later on have lyrics, like "Penis dimension", the "New brown clouds" and "The grand wazoo" at the time it was called "Think it over". This shows that the presence of lyrics has little influence upon Zappa's musical writing styles. More about this in the Make a jazz noise here section at "Let's make the water turn black".

3. It just might be a one shot deal - Frog song

"It just might be a one shot deal" consists of three theme blocks with two intermezzi along the way. Its structure goes as:

Beginning with most bars transcribed below:

0:00 Theme A. The song begins with a bass vamp of two bars with some improvised harmony over it. The singer begins in swing-time 4/4. The key is E Mixolydian.

1:13 Theme B with vocals. The bass plays a melody of its own in G against the sung melody.

1:24 Intermezzo I. The song now continues chromatically, ending with a dissonant chord B-Bb-E.

Remainder of the song:

1:47 Theme B with guitar solo.

3:18 Intermezzo II.

3:38 Theme C.

Handwritten musical score for guitar and voice. The score is in 4/4 time with a key signature of two sharps (F# and C#). It is marked "Tempo I".

The score consists of two systems of four staves each. The top staff is the vocal line, and the other three are guitar staves.

System 1:

- Vocal:** "Hummm..." followed by "Ah, now it..."
- Guitar:** Features a complex guitar solo with many triplets and slurs. The notation includes "Etc." and "Repeats several times".

System 2:

- Vocal:** "Ova bassa..."
- Guitar:** Continues with complex guitar solo notation, including triplets and slurs.

Tempo II: ♩ = ♩

Tempo I

Pennultimate bar repeats

r37

But you should...

Yes, you should - (Not strict)

Percussion figures ad lib.

'Cause it...

(Strict)

Handwritten musical score for a piece titled "But you should...". The score is written on four staves (two treble and two bass clefs). It features tempo markings "Tempo II: ♩ = ♩" and "Tempo I". Performance instructions include "Pennultimate bar repeats", "r37", "Yes, you should - (Not strict)", "Percussion figures ad lib.", and "(Strict)". The music includes various rhythmic patterns, accidentals, and dynamic markings like "mf".

It just might be a one shot deal, opening. Transcription: KS (update 2005, 3rd printed edition 2007). See also the notes in the text.

(But) Two Three Be-bop Be-bop Bob Bop Two Three Four

(One) Two Three Four ('Cause it etc.)

Handwritten musical score showing rhythmic patterns and lyrics. The top staff has a bass clef and contains a sequence of notes with rhythmic markings (3, 3, 3) and lyrics: "(But) Two Three Be-bop Be-bop Bob Bop Two Three Four". The bottom staff has a bass clef and contains the lyrics: "(One) Two Three Four ('Cause it etc.)".

"But you should...", indication during rehearsal ("Frog song" from "Joe's damage"). Transcription: KS (as above).

See also the notes in the text.

Intermezzo I however moves on in a peculiar way. Zappa recorded an early rehearsal on an ordinary cassette tape (mono and dim sound), probably to get an impression of the result that far. The band had been studying the scores and was now playing through the parts with Zappa present in his wheelchair and a guitar on his lap to demonstrate things. They were already able to play the music at a demo level and what Zappa basically does is some extra explanation and sharpening the accuracy of the performance. The Zappa Family Trust has put the tape on CD as "Joe's damage", which includes this piece as the rehearsing of the "Frog song". It's not much of public interest the way it has been brought out. It would have been a lot better to help people follow the process by including the scores that Zappa had handed over in a booklet. Now you get only half of the picture, but it did help me out to get an idea of this intermezzo I (see the transcription for the details with Zappa counting through it). Straight from record and without any clue it's sort of a jigsaw puzzle. The photo to the right shows Zappa sitting in his wheelchair during a rehearsal session in 1972 (source: "Joe's damage" CD cover, copyright ZFT).

The transcription of this section from "But you should ..." onwards is based upon some indications given during a rehearsal session that Zappa put on tape. I'm still not positive about the correctness of the transcription here though. The final version is also not entirely identical to the early rehearsal version. The "Frog song" example above is how I interpret the rehearsal of this section. The unit of timing as presented by Zappa remains the quarter note (one-two-three...) and the 16th note (be-bop). First the quarter notes are played as triplets. Here the Bb of "But" is strictly within the triplet, above no more. This Bb still falls within the previous meter and eight triplet notes follow in the next bar, notated above via a tempo change to triplet time. Then you get the be-bop figure, which ends with a note lasting 4/4. Two little changes were made later on. The lyrics went from "... while it's happening" to "... what this might be", thus the D falls out, having one syllable less to play. "... While it's happening" now gets superimposed as spoken text. The second 4/4 appears to have been augmented to 5/4 with free percussion figures starting.

4. Waka/Jawaka

Both "Waka/Jawaka" and "Blessed relief", the closing numbers of the two CDs of this section and the following section, can be seen as variation pieces, where themes return several times in different set-ups. These two pieces can also be presented as modulation schemes, both for the written themes as for the soloing. Every couple of bars the bass pedal changes to a different note, causing a change of scale.

"Waka/Jawaka" begins with theme I, stated twice in a different form. The theme itself can be seen as made up of two phrases, that can be interpreted as character variations upon each other. Not the whole melody gets varied upon, but some of its characteristics. For instance the rhythm of the first bar of both phrases goes identical. Both phrases lead to a sustained note at the end. For phrase one it's the highest note, while for phrase two it's the lowest note. The Ludwig study presents the lead melody on page 260 (first statement). The first example below begins with the second statement of the second phrase with the following set-up:

- staff 1: the lead melody played in the form of a series of chords involving three notes. Most chords are triads, but in bar 2 you also have a 7th chord and a stacked fourth.
- staff 2: a high pulsing fourth. Per beat you have three possible appearances of its rhythm, indicated as a, b and c in the example. The following order is consistently a-b-c, thus by itself more as if in 3/4, while "Waka/Jawaka" is in 4/4 all through.
- staff 3 (bars 1-2) and staff 4 (bars 3-4): another pulsing combination in the same rhythm. Here it's a third, E-G# in bar 1, followed by C#-E in bars 2-4. In bar 4 this third gets interrupted twice by a fourth. As on "Hot rats", overdubbing is used to let a relatively small band sound as a big band.
- staff 3 of bar 3: some more harmonic enrichment, lightly audible in the background.
- staff 4 (bars 1-2) and staff 5 (bars 3-4): a repeated bass figure functions as a counterpoint line. For phrase

2 this figure is a variation upon the bass figure for phrase 1. The figure for phrase 1 keeps returning during the piece.

The only exception I have found to this general rule is the [027] sonority accompanying the A-Lydian main theme of "Waka Jawaka" (1972). This superimposed chord features the least stable pitches of the fifth-stack (5-7), and thereby creates a very striking and dissonant effect.

It must be this pulsing accompanying chord about which Brett Clement writes the above citation on page 152 of his 2014 article. In A Lydian the indicated chord would be C#sus2, C#-D#-G#, with D# and G# indeed being the lead tones in A Lydian. I'm hearing this accompanying chord a bit different, but in combination with the chords of the lead melody all harmonic possibilities of the A Lydian scale can be heard. More about this subject can be found in the Zoot allures section of this study at the block about unstable chords in Brett's Lydian systems.

5

Handwritten musical score for a trumpet solo transition. The score is written on ten staves. The top staff is the trumpet line, starting with a box containing the number '5'. It features a melodic line with eighth and sixteenth notes, including a triplet of eighth notes. The second staff is the bass line, showing chords and dynamics like 'mp' and 'p', with 'Etc.' written after the first measure. The third staff is another bass line with 'mp' and 'Etc.'. The fourth staff is a bass line with 'mf' and 'p' dynamics, also with 'Etc.'. The fifth and sixth staves are labeled 'Sva' and contain rests. The seventh staff is labeled 'Bva.b.' and contains a melodic line. The eighth and ninth staves are also labeled 'Bva.b.' and contain melodic lines with triplets. The tenth staff is labeled 'Bva.b.' and contains a melodic line with a double bar line and a fermata-like symbol.

Waka/Jawaka, theme I - trumpet solo (transition). Transcription: KS (update Winter 2015, deposited at the I-depot, The Hague).

Waka/Jawaka, guitar solo, opening. Transcription: KS (update Winter 2015, deposited at the I-depot, The Hague).

The general construction and the modulation scheme of "Waka/Jawaka" go as:

0:00-0:51: Theme I in A Lydian as described above. This theme is immediately followed by a long period of soloing, thus it takes a while before we get back at another composed section.

0:51-1:41: Trumpet solo. The three pedal notes for the solos are F, A and G. Every couple of bars they alternate with each other. The scale used over these pedal notes is of the major type, rather than one specific scale. Mostly the Lydian scale from theme I returns, but players can also chose for major or Mixolydian. It can also happen that two scales happen simultaneously. As already mentioned above this is a returning feature in Zappa's music. One that complicates the analysis of his music. It's standard to identify scales, but Zappa's attitude towards scales is ambiguous. Frequently one is forced to listen to all

individual notes, chords and bass line included, to be positive what scale the music is using during a specific period. Sal Marquez begins his trumpet solo in F major, as you can see and hear in the first example.

1:41-4:43: Keyboard solo. On one occasion you have F# as a pedal note in combination with a minor type of scale (2:47-2:57). In this context this F# can best be interpreted as a pedal substitution for A.

4:43-6:31: Guitar solo. This solo begins with Zappa choosing for A Mixolydian (bars 1-4 of the second example), followed by two bars in G Mixolydian. Next the band returns to the A Lydian key from theme I. This is first indicated by Don Preston on keyboards, who is alternating the E and G#m chords. At 5:22 the solo briefly turns over to A Dorian, first indicated by the Am chord by the accompanying guitar.

6:31-6:44: Theme II, in A Lydian for its first statement.

6:44-7:22: Theme III, made up of two phrases (in F and A Lydian respectively). The first phrase is a single upwards moving melody, leading to phrase two at 7:12.

7:22-8:04: Drum solo.

8:04-9:07: Theme I returns.

9:07-9:19: Theme II, transposed down a major third. The pedal note, however, switches from A to D instead of F, causing the scale to become D Dorian.

9:19-9:45: Theme IV. This theme is made up of two phrases that get repeated. The melody follows two different diatonic scales. The bass plays a D-E alternation during the first phrase and a D-C alternation during the second. In both cases the D is a chromatic note in relation to the scale of the melody and the harmony. Thus this D can better be taken as a passing-through note for the second bass note. It sets the key to E major for the first phrase and C Locrian for the second. The latter scale is an obscurity, in music in general and in Zappa's music as well. The accompanying chord progression is II-V and VI-V respectively.

9:45-10:35: Theme II returns once more, now with the descant melody transposed up a minor third, while the bass is doing over a D-C alternation. So this last time this theme is played in D Mixolydian.

10:35-11:19: Theme V in D major.

Handwritten musical score for "Waka/Jawaka, theme III, end." The score is written in 4/4 time and consists of 12 staves. The key signature is two sharps (F# and C#). The notation includes various rhythmic patterns, including triplets and sixteenth-note runs. The first staff has a tempo marking of 11:12. The second staff is labeled "Like staff 1". The score is divided into three measures, each containing four staves. The notation is dense and includes many accidentals and dynamic markings.

Waka/Jawaka, theme III, end. Transcription: KS (update Winter 2015, deposited at the I-depot, The Hague).

Handwritten musical score for Waka/Jawaka, theme IV, fragment. The score is written on ten staves, divided into two systems of five staves each. The first system is in G major (one sharp) and 4/4 time. The second system is in B-flat major (two flats) and 4/4 time. The notation includes treble and bass clefs, various note values, rests, and articulation marks. The word "15ma" is written above the third staff in both systems, and "Like bar 1" is written above the fifth staff in the first system. The score features numerous triplets and slurs, indicating complex rhythmic patterns.

Waka/Jawaka, theme IV, fragment. Transcription: KS (update Winter 2015, deposited at the I-depot, The Hague).

megaphone, as explained in the CD booklet). It creates some degree of confusion, in my opinion intentional, which can also be said about this page of manuscript. All other included manuscripts are notated in a standard manner, but this sample got notated thus swiftly and loosely, that probably only Zappa himself could follow it.

Two staves are combined as if in a 4/4 meter, but it's not notated like that and I even doubt if these staves were indeed meant as to be played together. In it a couple of atonal chord progressions can be detected. My guess is that Zappa notated a couple of things to remember them with, to be worked out later. The on-line midi file contains the notes from the third staff from the sketch (counting from above). Nothing resembles a released song, so it's another example of something existing on paper only. In this case the sketched material is too limited to distract a composition from it.

THE GRAND WAZOO: THE BIG BAND

"Waka-Jawaka" and "The grand wazoo" were recorded during the same sessions. For "Waka/Jawaka" the set-up of the band is mostly like a smaller jazz combo. That this album can occasionally sound as a big band nevertheless is due to the frequent overdubbing. Sal Marquez for instance gets credited for "many trumpets" during "Big swift". "The grand wazoo" can be more truly using a big band, a band with which Zappa also made a short tour. In full the band ultimately involved twenty members. Both 1972 jazz albums have extended solos as well as large composed sections. Several blocks are relatively stable in their use of keys. More like "King Kong" than the modernistic "Uncle Meat main title" and the "It must be a camel" examples from the preceding sections. "For Calvin" on the other hand is very versatile. Despite of the quality of these albums, Zappa has not become well known as a jazz arranger.

1. For Calvin

Handwritten musical score for "For Calvin". The score is written on three systems of staves, each system containing three staves (likely guitar, bass, and drums). The tempo/mood is marked "Slow, gentle". The time signature is 12/8. The key signature has one sharp (F#). The score includes various musical notations such as triplets, slurs, and dynamic markings. The lyrics "Two times", "Where did...", and "...Calvin's car." are written above the staves. The piece concludes with a double bar line and a repeat sign.

Previous page: For Calvin, opening. Transcription: KS (update 2005, 3rd printed edition 2007).
Note: after relistening in 2017 a third melodic line has been added to bar 1, the lower melody in staff 2.

"The grand wazoo" opens with "For Calvin", a gentle melody in 12/8. The same meter appears in "Your mouth" from the previous section. The element of improvisation is handled differently in both songs. "For Calvin" begins with the main theme, prescribed for all, returning at the end. In between there's an interesting experimental improvisation block and a modernistic second composed block. "Your mouth" has just the lead melody prescribed, lasting all through. There's no improvisation block in this song, but the instruments are playing freely around the lead melody. The Calvin from the track title is Calvin Schenkel who drew the album front and back cover. Two outtakes are included in this section. It illustrates Zappa's leaflet story about an army of instruments players attacking another army of singers with notes. The emperor Cleetus (track 3) leads the brass players, blowing a mystery horn. "For Calvin" is very flexible in its use of scales. The first five instrumental opening bars don't follow a regular scale at all, the last transcribed bar 6 is in E. In between the key note floats and the scales keep changing. "Your mouth" is more stable in this aspect, staying in C Dorian.

Handwritten musical score for "FOR CALVIN PT. I". The score is written on three staves. The title "FOR CALVIN PT. I" is written in large, bold letters across the top. The notation includes various notes, rests, and accidentals. There are several annotations: "TB. II" and "BPM" in the top right; "CUP NOTE" above the first staff; "A" and "EXP." above the second staff; "B" above the third staff; and "C" and "CHANGE TO" above the fourth staff. The score is numbered 1 through 25 across the staves.

KEYBOARD

FOR CALVIN PT. I

ARPEGGIO FILLS

(A) COMP. ARPEGGIOS

CORN STYLE VIBRATO

For Calvin, opening bars of the trombone III and keyboard sheets. Original score.

I included this example in 2005, but later on I came across samples from the original score. First this shows that Zappa had notated this piece in 3/4 with one of my 12/8 bars coinciding with four bars in 3/4. Secondly the harmonies of my bar 1, played twice, were originally written as wider:

Audible on record:

- descant melody: C-B-G#-E. The last E is part of a chord with also a C# and B.
- lower melody: D-C-A-B.
- bass: G#-F#-E-A.
- harmonic fill in: B and E.

Present in the score, but not (fully) audible on record:

- trombone #3: Ab-E-C#-A.
- keyboard: arpeggio chords, each played for two bars, subsequently A-Ab-B-C-E and A-A-B-C#-E.

Such divergence between the written scores and the album recordings happens all the time. The Uncle Meat section gives an overview. I can't tell what the whole original score would be like, whether now audible parts replaced written parts or whether parts got skipped. It does make clear that the opening is harmonically complicated. The whole is chromatic, but there are fragments of diatonic material to be discerned in individual parts. It is clear that the keyboard part got largely skipped. Not only for the opening bars (reduced to B-E), but also when the first theme begins.



In the score the theme from above is referred to as part I. The screenshot here above is from the trombone #3 part of the second composed part. It starts at 3:57. Also this theme is all in 3/4, and harmonically quite complex, mingling chromatic passages with diatonic material. This part II encompasses the return of part I as a variation upon it.

2. The Grand Wazoo - Think it over - Another whole melodic section

About every song from "Waka/Jawaka" and "The Grand Wazoo" has a different group of people playing and/or overdubbing. The number of persons employed during various songs is less than you might expect from the sound, that can be like a big band, also when there are only five people credited. Apart from the overdubbing Zappa used his musicians efficiently in the sense he give each one a different instrument with its own part or - when he doubled a part - the instruments would have to be individually audible rather than melt together. In the transcription of "The grand wazoo" section below it's mostly one note played by one instrument. This is his normal approach to rock bands. Many producers however choose to record the same part with the same vocalist/instrument more than once, and then overdub it, or use a group of players to do exactly the same. It makes the sound more voluptuous, like the two Abba singers becoming something like a choir of two groups. There's no right or wrong here, it's more a matter of taste. Paul McCartney hated what "wall of sound" producer Phil Spector did to "Let it be", whereas John Lennon stated he made something out of nothing.

The existence of some demo tapes, released as "Joe's damage", has been mentioned in the previous Waka/Jawaka section. Novelties on "Joe's damage" are "The grand wazoo" with lyrics and a second theme Zappa had in mind for this title track. He introduces it as "Another whole melodic section" before playing it on guitar with Aynsley Dunbar on drums, and considers writing out a sketch for the next meeting. As it turned out, it went unused for "The Grand Wazoo" album. Shown below is a part of this theme, containing the central riff in bars 9-10, an irregular syncopic figure. Also presented is a section from "The grand wazoo" that starts with the tail of Zappa's guitar solo over the main vamp in D Dorian, that precedes the main theme block. The central theme starts in bar 13 and lasts four bars. The corresponding lyrics on "Joe's damage" are "If something gets in your way, just think it over". The transcription depicts four different harmonizations of this theme, not indicating the instrumentation. Because it's led over various instrument combinations the actual sound of its performance on "The grand wazoo" is of the big band type. This was carefully planned for as you can see down below in the corresponding "Think it over" bars. Zappa notated this theme four times note by note for each instrument, indicated as blocks A-D. The lead

melody by itself might be called being in A minor. The bass keeps moving, being part of the changing harmonies, rather than giving a pedal note, except for bars 17-18 and bars 25-26. Here the bass plays parallel with the lead melody. In bar 29 the second theme begins. This one also lasts four bars and gets repeated once, also in a different setting. It's a little sequence of three bars, followed by one closing bar. During this sequence a motif gets varied upon beginning a second lower each time, whereas the bass does the opposite by moving upwards with seconds. The descant melody of the motif follows a third, but the intervals (minor or major seconds) differ. It doesn't follow a specific key. Bars 37-38 are the first two bars of the third theme.

The image displays a handwritten musical score for guitar and bass, organized into four systems. The first system shows the guitar part in treble clef and the bass part in bass clef, both in 4/4 time. The guitar part includes dynamics like *mf* and *f*, and a second ending bracket labeled '2'. The bass part is marked 'As bar 1' and 'As bar 2'. The second system continues the guitar and bass parts, with a 'Brass' section indicated on the left. The guitar part has a '3-1' fingering and a 'p' dynamic. The bass part is marked 'As bar 1' and 'As bar 2'. The third system features a 'Guitar goes to background' instruction and a 'Three times' marking. The guitar part has a '3-1' fingering and a '3' marking. The bass part is marked 'As bar 1'. The fourth system continues the bass part with various musical notations like triplets and slurs.

Handwritten musical score, likely for a piece in 3/4 time. The score is divided into four systems of staves.

The first system (measures 1-4) features complex rhythmic patterns, including triplets and sixteenth notes, across the treble, bass, and tenor staves.

The second system (measures 5-8) begins with a key signature change to one sharp (F#), indicated by a box containing the number 29. The notation includes chords and melodic lines.

The third system (measures 9-12) continues with complex chords and melodic lines, featuring various accidentals and rhythmic values.

The fourth system (measures 13-16) includes a section labeled "Bvabassa" with a rightward-pointing arrow, suggesting a specific rhythmic or melodic pattern. The notation includes chords and melodic lines.

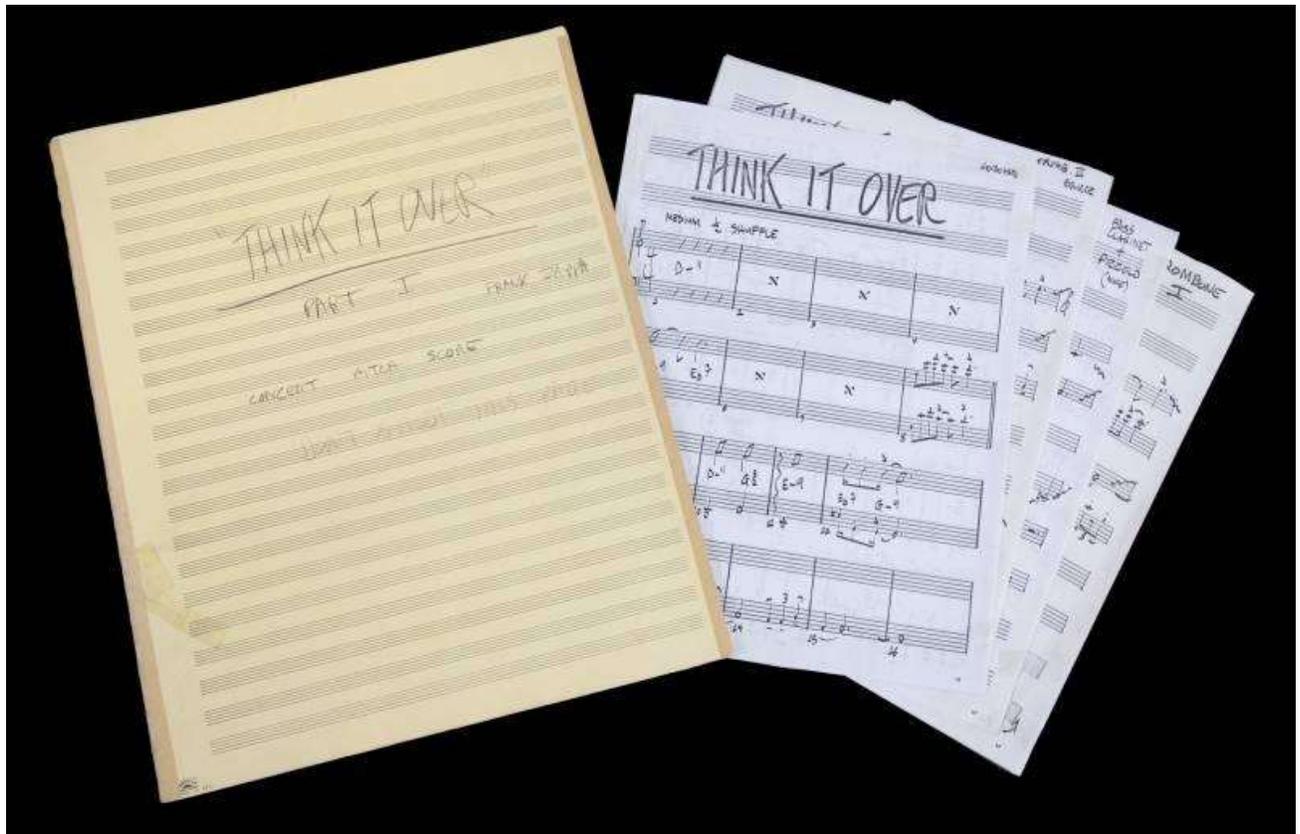
Previous pages: The grand wazoo, section. Transcription: KS (bars 1-12 and harmony/bass fill in from bar 13 onwards)/Wolfgang Ludwig (basic melody from bar 13 onwards).

Ludwig part published in 1992, KS: update 2007, deposited at the I-depot The Hague.

Note: via the Think it over score (see below in the Grand Wazoo section) I noticed Zappa had composed beat 3 of bar 13 etc. as a quintuplet.

The image displays four systems of handwritten musical notation for a section of 'The Grand Wazoo'. Each system consists of a grand staff with a treble and bass clef. The first system includes a circled '1' above the first measure, a '5' under a quintuplet in the first measure, and a circled '3' above the third measure. The second system features a circled '3' above the third measure. The third system has a circled '9' above the first measure and the handwritten note 'Bars 3-5 repeat alike' in the left margin. The fourth system shows a circled '8' above the first measure. The notation includes various rhythmic values, accidentals, and dynamic markings.

Another whole melodic section, section. Transcription: KS (update 2007, deposited at the I-depot The Hague).



Samples from the original sheet music for "Think it over", as auctioned on internet in 2014.

1

pp

As bar 3
mp

mf As bar 1 As bar 1

mf As bar 1 As bar 1

mf As bar 1 As bar 1

mf

Bars 1-4 repeat

6

If something gets in your way - , just think it

mp

mp

mp

mp

mp

Think it over (as on Joe's Damage), opening. Transcription: KS, combined with elements from the original score (update 2014, deposited at the I-depot The Hague).

"Think it over" on "Joe's damage" is the predecessor of "The grand wazoo" title track, essentially the same song. As happens quite often in Zappa's output, the score and the CD versions differ in a number of ways. The on-line midi file "Think it over, #1" represents the literal album version of "Think it over", while #2 corresponds with the album version combined with the keyboard score. The differences are:

- bars 1-4 of the score (bars 5-8 of the Grand wazoo example): the Grand wazoo vamp, later on used for soloing. It's a vamp of four bars in D Dorian. The first three bars are identical, the fourth is a minor variation. On "Joe's Damage" the chord progression is I-IV. The original score prescribes an improvised harmonic fill in, following Dm11. On "The grand wazoo" this song begins with soloing over the vamp for over a minute.

- bars 5-8 of the score (bars 9-12 of the Grand wazoo example): on "Joe's Damage" bars 1-4 repeat almost identically. The score prescribes a different progression, namely using the chords D-9 and Eb7. The second chord means that Zappa evades from the D Dorian scale to a scale with four flats, thus pretty different from the Dorian scale with all notes being natural. For the midi file #2 I'm assuming that the lead melody also plays a Db, or maybe an Eb, instead of a D, otherwise it would get dissonant. I only have page 1 of the keyboard part of the original score in a legible size, so I can't tell for sure how the entire score goes.

- bars 9-12 of the score (bars 13-16 of the Grand wazoo example): first theme. Other than on the 1972 album release, you're here having this song with lyrics. The bass line for the keyboard part goes a bit different from the bass guitar on "Joe's Damage", but the chords are pretty different. The score prescribes F2add3 - Em11 - Dm11 - G2add3 - Em9, followed by Eb7 - Gm9 for bar 12. On album none of these chords are played like that, it's a simple F - Em progression sounding in the background. Again the Eb7 chord is evasive and, for the midi file #2, again I'm assuming the lead melody plays along with this.

- bars 13-16 of the score (bars 17-20 of the Grand wazoo example): repetition of the first theme in a different set-up. Bars 13-14 of the score, as well as bars 17-18 and bars 25-26 of the Grand wazoo

example, are the part of the first theme where you can say that it's in A minor. The melody has A as the central note and in these bars it gets supported by an A pedal by the bass. This does not happen in the "Think it over" version on "Joe's damage". That version can hardly be assigned to a specific scale.

Blocks A-D in the score are the four different set-ups of the first theme (bars 13-28 of the Grand wazoo example). Block E corresponds with bars 29-36 of the Grand wazoo example. Bars 37-38 of this example represent the beginning of block F. Block I is reserved for a guitar solo, lasting 16 bars. On "Joe's Damage" you're getting at:

The image shows a handwritten musical score for a piece titled "Joe's Damage". The score is written in 4/4 time and consists of two systems of staves. The instruments and their parts are as follows:

- Guitar:** The top staff of the first system. It features a melodic line with various ornaments, including triplets and sixteenth-note runs. Dynamics range from *mf* to *pp* and *mp*. A circled "1" is written above the first measure.
- Brass:** The second staff of the first system, which is mostly empty, indicating rests for the brass instruments.
- Rhythm Guitar:** The third staff of the first system. It provides harmonic support with chords and some melodic fragments. Dynamics include *p* and *mp*.
- Keyboard:** The fourth staff of the first system. It plays a steady accompaniment of chords, primarily in the lower register.
- Drum:** The fifth staff of the first system, showing a simple drum pattern with eighth and sixteenth notes.
- Double Bass (Bass):** The bottom staff of the first system. It plays a melodic line with triplets and other rhythmic patterns, often acting as a pedal point.

The second system of staves continues the musical material, with similar instrumentation and dynamics. The notation includes various musical symbols such as slurs, accents, and dynamic markings throughout.

Think it over (as on Joe's Damage), guitar solo section. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

For the live performances of 1972 the solo sections often got complemented with figures and chord progressions for the brass section. In this case an upgoing chord progression of triads during bars 4-8. See the "D.C. Boogie" example from the next section - bars 7-9, staff 3 - for an example of a figure. Such movements and figures were probably indicated on the spot during rehearsals, as well as the rhythm section vamps. Here it's simply D pedal. The scale is predominantly D Dorian, as at the beginning of this composition, but D Aeolian also gets touched upon. In bar 5, beat 2, bar 7 beat 4 and bar 11, beat three, a Bb is used. This is a recurrent feature in Zappa's music, happening too often to interpret this as incidentally altering notes. He frequently mingles closely related scales. See the Guitar section for an overview of the clearer examples that you can find in this study.

KEYBOARD

THINK IT OVER

MEDIUM $\frac{4}{4}$ SHUFFLE

© 1974 by Frank Zappa, Hollywood, Calif. 17

Think it over. Page one of the keyboard score in Zappa's handwriting.

3. Cletus awreetus-awrightus

As mentioned above, transcriptions of the lead melodies from most tracks from "Waka/Jawaka" and "The grand wazoo" can be found in the Ludwig study (see the references from the left menu). In case of "Cletus awreetus-awrightus" on pages 261-2. This lead melody suffices for exposing the structure and rhythm of the main themes. For identifying the keys, one has at least to listen to the harmonies too, sometimes also the improvised parts. I've supplemented these melodies to a complete score for bars 1-18.

15ma 1

Keeps repeating

8va.

15ma 6

8va.

15ma 10

8va.

8va.

8va.

Cletus awreetus-awrightus, bars 1-18. Transcription: KS (update spring 2017, deposited at the I-depot, The Hague). Lead melody by Wolfgang Ludwig.

Cletus awreetus-awrightus, bars 16-42. Transcription: Wolfgang Ludwig.

Note: there's a writing error on the preceding page 261, in the sense that bar 5 got notated double. This has been corrected in the screenshot by moving the bar numbering one bar forwards.

While "Cletus awreetus-awrightus" is stable in 4/4 without rhythmic complexities, the keys are changing a number of times. The structure is one with a multitude of themes:

- 0:00, bars 1-3. Theme one in A. Bars 1 and 3 are regularly in A, while bar 2 features quite some altered notes. The bass and brass players are following a chord sequence: A-Bm-C#m-Dm-C#dim5-Bdim5-A.

- 0:04, bars 4-9. Theme two, a sequence of motives, nominally in G Dorian. This time the bass and brass section are playing the same melody with parallel octaves. The harmony is formed by the keyboard parts (staves 1-2). Bar 9 is used to modulate to E Mixolydian.

- 0:12, bars 10-15. Theme three, made up of three phrases:

Bars 10-11: chord progression with the bass and descant moving in opposite directions and using different notes. The first chord, for instance, is the D chord by the descant with an E beneath it. Combined the total harmony is Dmaj9, without the 7th.

Bars 12-13: sustained Bm chord, letting the key move over to B Dorian by switching the pedal note.

Bars 14-15: abrupt modulation to Db. Zappa applied both smooth modulations between closely related chords, sometimes with a pivot chord, and sudden modulations like this one. It causes a surprise effect.

- 0:21, bars 16-18. Theme four, a figure of one bar in E, repeated twice.

- 0:25, bars 19-21. Theme one. The themes return, but harmonized differently.

- 0:30, bars 22-27. Theme two.

- 0:38, bars 28-31. Theme three.

- 0:44, bars 32-37. Theme five, played twice.

- 1:01: variation upon theme four.

- 1:07: playing around a chord progression, being C#-Bb-G. It's a parallel movement of three major triads, causing modulations per chord. The scales are Mixolydian each time, but with different bass notes as keys. See also my discussion of "The idiot bastard son" in the YCDTOSA Vol. II section for how such parallel movements can cause key changes.

- 1:29: improvisation over a I-VII alternation in E Mixolydian.

- 1:51: continuing with a I-VII alternation in C# Dorian.

- 2:02: another variation upon theme four.

- 2:07: themes 1-3 return, again in different harmonizations and with vocal parts (without words).

- 2:49: theme 4 is used as the coda for this piece. This time the final bar ends with a C# minor chord, as if theme four should now be re-interpreted as being in C# minor.

- 2:57: end.

4. Eat that question

"Eat that question" from "The grand wazoo" (1972) has a four-bar riff in E Dorian as its basis. It introduces a keyboard solo, followed by Zappa on guitar, and it returns at the end of the song. Here this riff is represented with the brass harmony during the closing of this piece. This harmony blends the D and A chords, the combination being Dmaj9.

Eat that question, riff as played at the end. Transcription: Wolfgang Ludwig (1992; brass harmonies added by KS).

Before the riff enters the picture, George Duke plays a keyboard intro without any accompaniment by others. At 0:34 the riff is to be heard first with refined harmonies, played on two keyboards and deliberately non-synchronous. At 0:44 the band joins in. In 1987 the band played this piece in a similar way, though without the solos, to be found on "Make a jazz noise here". To the right an outtake from the background of the album cover with a little village in a desert landscape. It's in the background of the laboratory of the evil scientist Uncle Meat, a character first appearing in the Uncle Meat booklet.

5. Blessed relief

Like "Waka/Jawaka" from the previous section, "Blessed relief" follows a modulation scheme, in this case going as presented below. The lead melody and chords can be found in a lead sheet I encountered on the net. It stems from a collection of jazz examples from the seventies, including three pieces by Zappa (this one, "Peaches on Regalia" and "Son of Mr. Green Genes"). Probably they were copied from lead sheets by Zappa himself (they are very accurate).

Left above on the lead sheet this piece gets labeled as a "Jazz waltz" (the whole composition is in 3/4).

- 0:00 Intro. Improvisation over a I/II alternation in Bb Lydian.
- 0:27 Theme A, F major. For the last bar the E of the melody and chords from the previous three bars becomes an Eb. This goes for both the bass pedal note and the chord. Thus an altered chord or a mingling of F major and F Mixolydian.
- 0:40 Theme B, Bb Lydian.
- 0:53 Theme C, Bb Lydian.
- 0:53 Theme D, four bars in A Dorian, followed by four other bars in G Dorian.
- 1:12 Block E. Solos. Every four bars the following scales alter in this following order: F# Dorian - E major - F# Dorian - E major - A Dorian - G Dorian.
- 6:17 Themes A-D return.
- 7:10 Variations upon the intro, now used as outro.
- 8:01 End.

50

(SABZ ALTA) **BLESSED RELIEF** - FRANK ZAPPA

INTRO Bbmaj7#11 - SOLO OVER BASS LINE -

A

Fmaj7 G-7 A-7 Ebmaj7

Fmaj7 G-7 A-7 Ebmaj7

B

Bbmaj7 C7/bb G-7 C7 Bbmaj7

C

C7/bb G-7 C7 Bbmaj7 A-7

G-7 E-7b5 Bbmaj7 A-7 G-7

E-7b5 Bbmaj7 A-7 G-7 E-7b5

D

A-7 G-7

(SOLOS)

F#-7 Emaj7 F#-7 Emaj7

A-7 G-7 [END BY SOLING OVER INTRO]

FRANK ZAPPA - "GRAND WAZOO"

Blessed relief, lead sheet (anonymously posted by someone on the net). Possibly a copy of the original score.

WAZOO - IMAGINARY DISEASES - LITTLE DOTS: THE JAZZ BAND LIVE

When hiring the players for the "Waka/Jawaka" and the "Grand wazoo" sessions they were informed that it was Zappa's intention to do a small tour afterwards. It proved to be difficult to find a suitable time schedule for everybody taking part. All players were session musicians who had to take their other contractual obligations into consideration as well. The only possibility for a big band tour proved to be eight venues in Europe and the U.S. in September 1972. Twenty musicians took part of it (to the right part of the inner sleeve photo from "Wazoo". The ZFT released the final Boston concert with this group in 2007 as a double CD, called "Wazoo". Just for its sound and composition of the band it's unique. Zappa writes in the "Wazoo" booklet: "To begin with, the Wazoo bears little resemblance to any previous form of rock and roll band. There are twenty musicians in it who mostly sit down and read music from an array of charming little fiber-boards stands. Nobody sings, nobody dances. They just play music." At the time the audience got presented with music mostly unknown to them ("The grand wazoo" album was still upcoming). The majority of the material has become known in other versions afterwards. Today there are no unreleased compositions in the setlist of "Wazoo". It's the different arrangements and settings that make it an interesting show. Following hereupon Zappa did a second series of shows in 1972 with a smaller selection from this group, referred to as the "Petit Wazoo" band. This band played a couple of titles only included in two ZFT releases.

Greggery Peccary mvt. I, interlude - mvt. III, guitar solo

In the case of "Greggery peccary", the music got played in four movements of modern music. Most rock band parts, to be found on "Studio tan" (1978), aren't included here, though the booklet accompanying the CD makes clear that the story of "Greggery Peccary" was completely existent in 1972. See the Studio tan section for the correspondence between these two "Greggery Peccary" versions. The fact that the version here lasts 32 minutes, a lot longer than the "Studio tan" track, depends upon the two-third component with improvisations. These improvisations are taking place in prearranged environments. Zappa himself describes the second half of the first movement as an interlude with 16th notes. It's made up of variations upon a theme given by Zappa, strictly in 4/4 and indeed with 16th notes. It starts softly with just two instruments playing around the theme and ends with the whole band all doing their own variations. The example below is taken from somewhere in the middle, starting at 3:46. In the 4th printed edition of this study I identified this episode as E Dorian. By itself it can be called that way, but after relistening to it in a wider context, I think it can better be seen as in D. There's a descending bass line G-F#-E-D and at various point the accent lies on D.

Gregery Peccary mvt. I, interlude, fragment. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

In the second movement the climate for the improvisations is determined by an accelerated bolero type vamp, to be followed by a tango vamp. In the third movement the improvisations start off with something

that gets called circular breathing: everybody playing slowly in the same key, thus forming coincidental harmonies, that keep shifting. Gradually a minor second movement moves in as a vamp, best known from the James Bond theme. Next this movement itself gets varied upon on guitar.

Greggery Peccary mvt. III, guitar solo, section. Transcription: KS (update Summer 2019, deposited at the I-depot, The Hague).

At 8:53 this piece turns into a more regular pedal note guitar solo, in E minor in this case. The example above is played slowly between 9:29 and 9:50, stable in this key. As this solo is evolving more and more chromatic notes are getting involved. At some points even a bit cacophonous, with Zappa citing the "New brown clouds" theme rather fast and the others freely improvising. See the next track below for "The new brown clouds".

Greggery Peccary mvt. IV - The new brown clouds

The fourth movement of "Greggery Peccary" is also known as "The new brown clouds" because of the lyrics it has on the 1978 "Studio tan" album version. Globally this composition knows three blocks:

- A. Exposition of the main theme and accompanying vamp (diatonic).
- B. Medley of a number of sections (E-J), where the prescribed melodies are chromatic/atonal. Only the occasionally returning vamp relates this block to the opening block.
- C. Re-exposition of the main theme, variations upon it and a coda.

Block B is an example of what George Duke referred to as "organized chaos" (undoubtedly in a positive manner). Here Zappa is deliberately irregular, both regarding rhythm and melodies. Blocks A and C, on the other hand, are the opposite. They are about the art of variation, quite "classical".

Intro.

- 0:00 Four bars with a two-bar vamp, that accompanies several sections.
- 0:08 Bars 5-8. First theme. In many compositions you can encounter an ambiguity what key a piece is in.

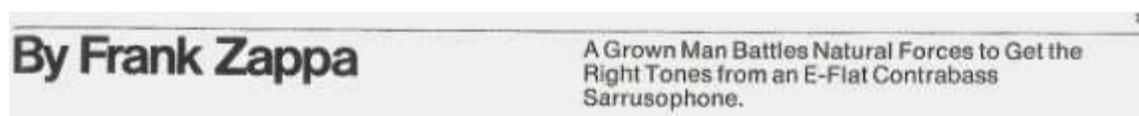
The vamp suggests G, while the melody follows G Mixolydian. This first theme is a slower version of the "Billy is a mountain" line from the "Just another band from L.A." album, as also indicated by Zappa in the Wazoo booklet.

Section A.

- 0:16 Bars 9-13. A variation upon the first theme. All through his career Zappa liked to experiment. About always he did this within the normal range of what instruments can do and with the material at hand. Some modern composers rather come up with ideas like letting an ensemble play under water as being truly innovating, along with fantastic musical theories to explain the genius of it, but Zappa kept being "traditional". In this case he lets the trombones/tubas play harmony notes in their lowest registers. The sounding effect is a low cluster, not bright enough for me to get it on paper with any degree of certainty. Maybe it also includes Earl Dumler (citing the Wazoo booklet):



Five wind players from the 20-member Wazoo band, with Earl as:



- 0:26 Bars 14-16. Another experimental element: a couple of pattern breaking bars with a group of notes pulsing in an irregular rhythm. The notes form a dissonant chord, A-Bb-C-D-(G), next to the sustained low brass notes, that I can't identify with certainty. The Bb clarinet part from below has to be transposed so that it plays along with trombone III. At this point, however, the Bb clarinet would be playing a B natural, making these bars even more dissonant (these two bars are chromatic). But this note got skipped during the live performance.

- 0:32 Bars 17-20. Drum solo. While Zappa had written out the drum part in detail, the 1972 live performance only roughly follows this drum part. Specifically during bars 14-16 the drummer beats steady eighth ticks instead of following the complex rhythm of the lead melody. It's easier to perform these bars when someone is drumming the meter in a standard way, I would guess. During bars 17-20 it becomes an improvised drum solo, only following the prescribed rhythm.

Section B.

- 0:39 Bars 21-27. Main theme. This main theme is also present as the "New brown clouds (1978)" example from this study, where it has lyrics ("Who is making these new brown clouds ..."). In 1978 the vamp from the opening is used all through this main theme, which applies less to the 1972 version. Only in bars 24-26 it's clearly present some more. This vamp is responsible for the 6/8 meter. The main theme has its own meter, lasting 10/8 for its first phrase, repeated two times. Zappa didn't notate 10/8 over 6/8, but his notation of the accents makes it perfectly clear how it should be played (grouped as 2+2+4+2 eighth notes). The second phrase of the main theme lasts 14/8, grouped as 2+3+2+2+3+2 eighth notes. The main theme is played via parallel thirds and fourths, though the Bb clarinet part would extend these chords to triads. I'm not hearing the clarinet on the CD, but one could very well include it. It's just one of many examples where the recorded version goes a bit differently from the score.

Section C.

- 0:53 Bars 28-35. With the vamp no longer being used, the meter becomes 3/8. It's just an A pedal with keyboard improvisation, modulating to A Dorian.

- 0:59 Bars 36-62. Violin solo over a series of four pedal notes/chords. It begins with 8 bars continuing in A Dorian (or minor, the F/F# isn't present). Next the pedal note becomes F and the key F Lydian. At this point the transcription from below stops. I'm continuing with the general outlines, at first based upon the trombone III part, pages 2-3, as shown below.

1

6

8va b.

11

8va b.

15

Feedback

DRUM SOLO

21

26

8va b.

32

40

The new brown clouds, 0:00-1:06. Transcription: KS (update fall 2019, deposited at the I-depot, The Hague). Notes:

- The trombone I and III parts could be taken over from the example below.
- The low brass notes, beginning in staff 4 from bar 6, are an approximation only.

TROMBONE
III
BRUCE

THE NEW BROWN CLOUDS

4
RUNGER
fff
A
OPEN
B
C
OPEN
fff
27
36-62

TAMBOURINE

DRUMS

"THE NEW BROWN CLOUDS"

1-4
A
B
C
TUNE
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

B. CLT.
Perc.
(MIKE)

THE NEW BROWN CLOUDS

(BASS CLT.) (MARK/DAVID)
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

SEE 28 LIA (EXCEPT CHAIR PERFORMANCE WITH DANCE - THEN LAY OUT)

THE NEW BROWN CLOUDS

MODERATO (American)

STEN

PUNKER

DRUMS

045

Handwritten musical score for "THE NEW BROWN CLOUDS". The score is on aged paper and includes a title, tempo/mood marking "MODERATO (American)", and various musical notations. It features several systems of music with labels "A", "B", "C", and "D" indicating different sections. The word "STEN" is written above the first system, and "PUNKER" is written above the second system. To the right, there are staves for "DRUMS" and "045".

Handwritten musical score for a percussion ensemble. The score is on aged paper and includes various musical notations and performance instructions. It features several systems of music with labels "D", "E", "G", and "H" indicating different sections. The tempo/mood marking "MODERATO" is visible at the top. The score includes instructions such as "SOLO FILL", "CORAN VIB.", "CORAN VIB.", "CAP MUTE", "CONTINUOUS ROW GLASS", and "PART OPEN". The score is written in a complex, rhythmic style with many notes and rests.

- 1:20 Bars 63-67. Phrase two from the main theme returns, now with its accents following the 3/8 meter.
Section D.

- 1:23 Bars 68-79. Variations upon the main theme in 3/4.
Section E.

- 1:52 Bars 80-85. Rhythmically accentuated figures.

- 2:08 Bar 86. This bar has a pause of indefinite length. What sounds as an electronically mutated clarinet is playing a little solo.

- 2:27 Bar 87. A sustained chord.

- 2:30 Bar 88. A brief melodic line with a pretty complicated rhythm in 4/4.

Section F.

2:34 Bars 89-96. Soloing over the returning vamp in 6/8.

Section G.

- 2:48 Bars 97-100. Short melody followed by two bars more with the vamp.

- 2:55 Bars 101-102. Another short melody, notated as two times (7+5)/16.

- 2:58 Bars 103-108. Some more soloing over the vamp in 6/8.

Section H.

- 3:09 Bars 109-114. A longer melody using 6/8 and (7+5)/16.

- 3:20 Bars 115-118. The vamp returns.

Section I.

- 3:27 Bars 119-126. A sequence, characterized by interval jumps going up and down while enlarging, as was also happening in bars 109-110.

- 3:42 Bars 127-130. A shorter melody with fast note strings.

Section J.

- 3:50 Bars 131-146. A larger melodic section in 3/4.

- 4:24 Bar 147. A pause of indefinite length with the participants saying "Ah".

Remaining sections.

- 4:28 The main theme returns, accompanied by the opening vamp. At this point I don't have any more samples from the score at hand (page 4 as it seems, on the backside of page 3), nor did I transcribe anything from this block.

- 4:46 Variations upon the main theme.

- 6:05 The compositions ends. Applause with Zappa thanking the audience for coming to the concert.

- 7:32 "One, two, three", leading to the encores.

- 7:34 End of the track.

Variant I processional march

The piece presented as "Variant I processional march" is an earlier version of "Regyption strut" from "Sleep dirt". This one begins with some 20 seconds of march music. Other than "The little march" from "Run home, slow", this march is a parody. It's in strict 4/4 with a stereotype accompanying figure. This figure implies that the key is C# or C# minor. No other part is playing in this key, or in any key, consistently. So you're getting some sort of a cacophony, that, as a short prelude, proves to be funny.

12

Figure continues

14

(Figure keeps continuing)

Handwritten musical score for Variant I processional march, opening. The score consists of five staves. The first staff is marked with a circled '7' and a sharp sign. The second staff has a few notes. The third staff has a melodic line. The fourth staff has a complex rhythmic pattern with triplets and a '4p' marking. The fifth staff has a bass line with the text 'Figure stops' and 'Etc.' written below it.

Handwritten musical score for Variant I processional march, opening. The score consists of five staves. The first staff is marked with a circled 'III'. The second, third, and fourth staves have melodic lines with triplets. The fifth staff has a bass line with the text 'Bass Figure continues' written below it.

Variant I processional march, opening. Transcription: KS., except for the trombone part in staff 3, that could be taken over from the copy below. Update 2008, deposited at the I-depot, The Hague.



Variant I processional march, guitar and trombone part, opening. Source: original score. Everything is Zappa's handwriting, except for the title "Variant I" on the trombone part, that apparently was inserted there by somebody else. The guitar part isn't actually played on "Wazoo".

The march wasn't a separate piece added as an intro to the main melody. It was literally composed this way, as the original trombone and guitar parts show, that I encountered on internet (samples are added to the transcription). The "Regyption strut" melody, as we know it from "Sleep dirt", starts in bar 9. More about "Regyption strut" in the Sleep dirt section.

Imaginary diseases

A handwritten musical score for a piece titled "Imaginary diseases". The score is written on five systems of staves. The first system consists of two staves, both in bass clef with a key signature of one sharp (F#) and a 4/4 time signature. The second system consists of three staves: the top staff is in treble clef, and the two bottom staves are in bass clef. The third system also consists of three staves: the top staff is in treble clef, and the two bottom staves are in bass clef. The fourth system consists of three staves: the top staff is in treble clef, the middle staff is in treble clef, and the bottom staff is in bass clef. The fifth system consists of three staves: the top staff is in treble clef, the middle staff is in treble clef, and the bottom staff is in bass clef. The notation includes various rhythmic values, accidentals, and dynamic markings. A handwritten note "Like bar 1" is present in the first system. The score concludes with a double bar line and repeat dots.



Imaginary diseases, section #1. Transcription: KS (update 2006, 3rd printed edition 2007).



Imaginary diseases, section #2. Transcription: KS (update 2006, 3rd printed edition 2007).

For the remainder of the fall of 1972 Zappa continued with a small tour with a selection of ten persons from the previous "Wazoo" band, visiting a dozen cities in Canada and the U.S. He selected and mixed the recorded material between 1972 and 1977. These pieces by what has become known as the "Petit Wazoo" band only first got released by the Zappa Family Trust in 2006 as "Imaginary diseases", filling in a conspicuous gap in the Zappa history (CD cover to the right). Listening to it, it becomes peculiar why Zappa himself has released nothing of it. It was all new compositions at the time in 1972-1973, and partly still is today. There would have been enough on the tapes for editing a single album, and why not a single part of it got included in the YCDTOSA series from the eighties is even more inexplicable. Next are two sections from "Imaginary diseases", consisting of a two-minute theme for brass players and rhythm section followed by a five minute guitar solo before the theme gets repeated.

The first example contains the first two themes in A Mixolydian. The second example begins with a variation upon the first theme with the band playing it in full. It's followed by a gentle bass theme, that serves as a bridge between the opening block and the ensuing guitar solo. In bar 11 the band modulates to B Dorian. In bar 13-14 the bass plays just B pedal, for the remainder of the solo it follows the vamp from bar 15.

Rollo

The now earliest available version of Rollo is also present on "Imaginary diseases". This composition had to wait for "YCDTOSA Vol. I" for its first release. By then it was already in its fifth shape. These are subsequently available on the following releases:

1) Imaginary diseases/Little dots (recording year 1972).

Already known before to the bootleg collectors, the Rollo track on "Imaginary diseases" album is a shortened version. It started with a sung section, followed by "Rollo interior" (see 2) and a solo by Tony Duran. Only then the album version starts. This sung section did get officially released on the 2016 "Little dots" CD by the ZFT.

2) St. Alphonso's pancake breakfast (1973).

The second instrumental half of this piece is known as "Rollo interior", composed separately (see the next section for a block from this piece). It can be played as an independent song or in combination with "Rollo". The bootleg versions of 1) explain the word interior: it was intended to be played between the sung part and the instrumental block.

3) Quaudiophilic & One shot deal (1975).

The opening below shows how "Rollo interior" relates to "Rollo". The first motif of "Rollo interior" is a variation upon the opening bars 1-3 of "Rollo". The second motif from "Rollo" (bar 5) returns slightly different at the end of "Rollo interior". The corresponding lyrics on "St. Alphonso" are "saint al-phon-so". "Rollo interior" can be considered a large through-composed character variation upon the first motif, an ongoing string of 16th notes in 4/8 or 8th notes in 4/4, depending upon how you're notating things. "Rollo interior" itself isn't present on this version. This one has an opening block with Zappa playing a solo. It begins with a theme in Bb Lydian (bars 1-4 and 13-16). Bars 5-12 are in a different scale without a clear key note. The lead melody in staff 1 plays the progression D-Em-Em-G, while the others do D-C, thus playing against it and enlarging the total harmony. The solo is in E Dorian.

4) Saturday night live (1978).

A TV appearance by Zappa's band. This is the only version that contains "Rollo interior" and "Rollo" combined.

5) YCDTOSA Vol. I (1979).

Here "Rollo", without "Rollo interior" and a solo, is used as the finale of the so called Yellow Snow suite (tracks 1-4 from "Apostrophe (')"). It has lyrics added to the earlier material.

12

mf

ovab. mf

Bars 5-6

mf

repeat three times

13 Guitar

mf

mp

ovab.

14

pp

pp

Rollo (1975), opening. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

"Rollo" is one of many pieces, where Zappa is mingling diatonic with chromatic/atonal material. On the "Imaginary diseases" version of this title you can hear the following:

- 0:00 The figure from bars 5-12 from above, in this case played as a downwards sequence.
- 0:13 Ab pedal. It begins with the just a sustained extended chord F-Ab-Bb-Eb chord (Fm7 add 4). Next the melody begins following notes from Ab major for bars 1-4 and 9-13 in the example below (without using the C), interrupted by Ab minor (with the augmented 7th) for bars 5-7 and 14. That is if you want to explain it diatonically. One might also call it octatonic, using Ab-Bb-Cb-Db-Eb-Fb-G.

1 8

8va b.

6 8

8va b.

12 8

8va b.

16 8

8va b.

Rollo (Imaginary diseases), 0:18-0:48. Transcription: KS (update 2019, deposited at the I-depot, The Hague).

- 0:41 Chord progression following Ab Lydian (bars 15-18 from the example above). Notable are the dotted quarter notes, causing a rhythmic divergence between the parts.
- 0:51 The bass pedal switches to Eb. The chords follow Eb major. The F chord at 1:00 prepares a modulation to Bb major.
- 1:01 Bb pedal with chords from Bb major.
- 1:12 The music is gradually becoming chromatic.
- 1:32 Repetition of 0:13-0:17.
- 1:36 Becoming chromatic some more.

1

8va b.

5

8va b.

Rollo (Imaginary diseases), section. Transcription: KS (update 2019, deposited at the I-depot, The Hague).

- 1:52 A melody over descending pedal notes, with chromatic and fragmented diatonic material:
Over Bb-G-C the melody plays:
bar 1: Eb-Fb-G (chromatic), followed by D-Ab-F (fragment from Bb Mixolydian).

interval pattern: +1+3-5-6-3 (number of minor seconds in a jump, up- or downwards).
 bar 2: B-C-F-Db-Gb-Eb (chromatic).
 interval pattern: +1+5-4-7-3.
 bar 3: D-G-C-F (stacked fourths, fragment from Bb major type), followed by Db-Gb (chromatic).
 interval pattern: +5+5+5-4-7.
 bar 4: Eb-D (fragment from Bb major/Mixolydian), followed by E-A-G#-C# (chromatic).
 interval pattern: -1-10+5-1+5.

Next the bass pedal descends with minor seconds:

bar 5: Over A-B the melody plays F#-B-C#-G# (fragment from A major/Lydian).

interval pattern, figure #1: +5-10-5.

bar 6: Over G#(Ab)-A#(Bb) the melody plays G-D-F-C# (chromatic).

interval pattern, figure #2: -5-9+8.

bar 7: Over G-A the melody plays E-A-B-F# (fragment from G major/Lydian).

interval pattern, figure #1: +5-10-5.

bar 8: Over F#-G# the melody plays F-C-D#-B (chromatic).

interval pattern, figure #2: -5-9+8.

bar 9: Over F-G the melody plays D-G-A-E (fragment from F major/Lydian).

interval pattern, figure #1: +5-10-5.

Etc. While the meter, rhythm and bass line offer stability, the melody is highly irregular for its use of scales. Regarding intervals and melodic directions some patterns can be discerned. Bars 1-2 have similar movements, while bars 5-8 show two figures that get transposed. The "Rollo interior" interlude does something similar in a faster tempo.

- 2:22 C# pedal with a chromatic figure, played in a downwards sequence.

- 2:36 Chord progression. First the Esus2 chord, played over a descending bass line, F#-E-D-C#-C (on the last C adding an A). Next this piece ends with the F# chord.

- 3:20 End.

On "Quaudiophiliac" it goes as:

- 0:00 Opening as described above.

- 0:21 Guitar solo in E Dorian. After this solo the song continues as on "Imaginary diseases".

- 3:27 The figure from bars 5-12 from the first example above, like on "Imaginary diseases" played as a downwards sequence.

1

mp 3 3 3

pp (faint) 3

8va b. mf

5

8va b.

Rollo (1975), section. Transcription: KS (update 2019, deposited at the I-depot, The Hague).

- 3:37 Ab pedal. Other than above at "Imaginary diseases" the melody over it isn't composed but improvised. This time in Ab Mixolydian.
- 3:58 Continuing as from 0:41 onwards on "Imaginary diseases".
- 5:59 End.

Been to Kansas City in A minor

BLUES

The most typical of blues is its chord scheme: I-I-I-IV-IV-I-I-V-IV-I-I. Several variants are possible. The one chord takes up 8 of the 12 bars and can be said to be decisive for a blues piece being in minor/Dorian or major/Mixolydian. Another characteristic of blues is that there's some amount of freedom for the IV and V chords to be major or minor triads. They can deviate from the key the I chord is following, causing some ambiguity about the scale the piece is in. Other elements that you can call blues-like are:

- The presence of pentatonic passages.
 - The presence of the blues-scale (the pentatonic scale with an additional chromatic note).
- "Been to Kansas City in A minor" is in A Dorian/minor with both F# and F natural being used. The following scales are involved:

- A Dorian: A-B-C-D-E-F#-G.
- A minor: A-B-C-D-E-F-G.
- A minor pentatonic: A-C-D-E-G.
- A minor blues-scale: A-C-D-D#-E-G.

The example below contains the first 12-bar-blues-cycle of this piece:

- Bars 1-4 with the I-chord following A Dorian. The accompaniment is consistently playing triplets, so this example might just as well have been notated in 12/8.
- Bars 5-6 with the IV-chord being a minor triad (Dm with an F natural), so switching to A minor.
- Bars 7-8 with the I-chord in Dorian again.
- Bar 9 with the bass being on step V, while the chords alternate V and II. Other than Brett Clement says below, the V chord harmony is a minor triad. The trumpet only plays a G. If the guitar would play a G#, the dissonance would be audible. It does happen in Zappa's blues music that he is using a major triad upon step V in a piece that is otherwise in minor/Dorian (e.g. "Tiger roach"), but not in this example. It remains in Dorian.
- Bar 10 with the bass being on step IV. Now you are getting at a dissonant situation with the guitar chord being G augm. instead of D or Dm. The presence of the D# in the guitar chord, next to the melodic D natural, is something that can happen following the A minor blues-scale. But this bar does more than that.
- Bars 11-12. Return to I with Dorian and minor being mingled. The guitar chord in bar 11 uses the F natural from A minor, while the bass in bar 12 follows Dorian with an F#.

1

8va b.

This system contains measures 1 through 3. The top staff is a single melodic line in treble clef. The middle two staves are a piano accompaniment in treble clef, featuring complex chords and triplets. The bottom staff is a bass line in bass clef, primarily consisting of eighth notes and triplets. The key signature has one flat (A minor), and the time signature is 3/4.

4

8va b.

This system contains measures 4 through 6. The top staff continues the melodic line. The middle two staves show more intricate piano accompaniment with many triplets and sixteenth notes. The bottom staff continues the bass line with similar rhythmic patterns. The key signature and time signature remain the same.

7

8va b.

This system contains measures 7 through 9. The top staff features a melodic line with some rests. The middle two staves have piano accompaniment with many triplets. The bottom staff continues the bass line. The key signature and time signature remain the same.

10

8va b.

This system contains measures 10 through 12. The top staff has a melodic line with some rests. The middle two staves have piano accompaniment with many triplets. The bottom staff continues the bass line. The key signature and time signature remain the same.

Been to Kansas in A minor, 0:00-0:38. Transcription: KS (update 2019, deposited at the I-depot, The Hague).

In his Response to me Brett Clement writes:

- Regarding my labeling this piece as A Dorian: "not even close; melody is minor pentatonic, chords are from the minor blues: i-iv-i-V-iv-i; the only Dorian element is the harmonic embellishment of the i chord".

- Regarding blues in general:

"Blues aspects in Zappa range from full-on 12-bar blues based music (ex. Road Ladies) to blues-styled solos over static one-chord vamps (ex. The Gumbo Variations). Almost without fail, Sloots analyzes these situations as Dorian or Mixolydian. In certain cases, he is simply wrong (ex. Lost in a Whirlpool/Been to Kansas; basically, there is no way that the 12-bar blues can be labeled as strictly Dorian). In others, there is a possibility that the term "Dorian" could be used to describe the music, but with an important qualification:

2. The minor-pentatonic scale.

As is well known, blues music is based around the minor-pentatonic scale (ex. C-Eb-F-G-Bb). In the traditional 12-bar blues, the chords are usually major (I, IV, V) or Mm7, while the melody tends to use notes of the minor-pentatonic scale. In Zappa, blues elements most commonly occur in his guitar solos over static minor-key tonic vamps (many times, these solos are taken from songs that are explicitly blues based (ex. The Illinois Enema Bandit)). Zappa tends to use notes of the minor-pentatonic in these solos. However, you will find him occasionally adding one or two pitches, and these are usually scale degrees of the Dorian scale. The characteristic Dorian addition would be, therefore, the "raised" scale degree six. This is also sometimes present in the accompaniment in the form of an embellishing major IV chord (the "D/M" progression is discuss). One might conceptualize this addition as a remnant of the major IV chord of the 12-bar blues progression."

- And: "However, it is also necessary to recognize the differences between "pure" Dorian and minor-1 pentatonic in a blues context. For example, compare the purely Dorian solos of "Drowning Witch," "Zoot Allures" (ca. 1976), and "The Mammy Anthem" with the minor-1 pentatonic solos "Advance Romance," "I'm the Slime," and "Trouble Every Day," etc.. To my ear, these solos sound quite different. The former are based on diatonic structures, the latter on pentatonic melody. Therefore, there needs to be a separate classification for these examples. Simply labeling them all as Dorian, as does Sloots, is misleading. (However, I will admit that the line between pure Dorian and minor-1 pentatonic is not clear in all examples)."

This topic is also coming by in my Burnt weeny sandwich section, where the pentatonic scale is being addressed to in general, also outside a blues-like context. The discussion Brett is trying to raise can be understood, but is essentially non-existent. He suggests that for a number of songs/solos one has to choose between something being pentatonic OR diatonic (minor/Dorian or major/Mixolydian), while the reality is that it is BOTH. Pentatonic passages happen frequently in Zappa's music, but they are about always embedded in a diatonic environment. Not just as occasional additional notes, but systematically. Pure Dorian is as a term rather useless. It is true that "Been to Kansas City in A minor" isn't 100% following the Dorian scale or the minor scale, but it is far away from purely minor pentatonic. As it comes to pure, none of the preludes & fugues from the Well-tempered clavier by Bach are 100% in one major or minor key. Altering notes is standard rather than exceptional.

Been to Kansas in A minor, most of the bars with the I-chord.

In this last example I've taken most of the I-chord bars separate. I've encircled the notes/chords that extend

the pentatonic scale to the Dorian/minor scale in red (F/F# and B). Chromatic passing notes are encircled in green.

The neutral way to describe this is diatonic with pentatonic passages. If you like you can call it a subcategory of a diatonic scale, in most cases Dorian.

Of course there's a lot of improvisation going on in Zappa's blues recordings. In the example above the lead melody is played by one of the trumpetists. Most other blues examples in this study are also better described as diatonic with pentatonic passages than as just pentatonic.

- "Lost in a whirlpool": here I agree that this song isn't simply Dorian. This piece can't be uniquely attributed to a single scale, it's neither "strictly" Dorian nor minor pentatonic.
- "The world's greatest sinner": opening bars with one blues cycle. This one alternates A Mixolydian and Dorian with both C# and C natural turning up. Upon I the music isn't pentatonic but hexatonic.
- "Metal man has won his wings": my transcription is a section with IV-I-V-IV-I from the scheme. Here E Mixolydian and Dorian are mingled with G# and G natural being used next to each other, remindful of the major blues scale, but the other two diatonic notes are applied too.
- "Tiger roach": my transcription contains the end with one blues cycle. It's basically E Dorian, though with a major triad upon step V. In this case it can be called (minor) pentatonic to a good deal. Only bar 10 with the major triad isn't (major) pentatonic. The G# in bar 9 might be seen as a passing note.
- "All skate", 2nd example. Far away from just pentatonic.
- "Dickie's such an asshole", 1st example. See this example and my description. Passages are pentatonic, but the other two diatonic notes are present too.
- "200 Years old", opening bars: the minor pentatonic scale is part of both the Aeolian and Dorian scale. By inclusion of his minor pentatonic examples and "blues related things" under his Dorian section, Brett also implicitly admits the Dorian environment. In this little example the E being natural determines the scale being Dorian instead of Aeolian.
- "Big leg Emma": this one goes to some degree as traditional blues as Brett describes above. The E, A and B are major chords, the sung lead melody uses a minor type of scale. It follows E Dorian, rather than being minor pentatonic. The interlude also knows a lot of chromaticism and some mingling of Mixolydian and Dorian.
- "Duck duck goose", section with one blues cycle: the full E Mixolydian scale is deployed.
- "Dong work for Yuda (H.O.)", end with one blues cycle. Major and Mixolydian are alternating. Diatonic scales are normally played.
- "Sexual harassment in the workplace", intro with one blues cycle. This one is in minor. I've included the comment by Brett in my Guitar section.
- "What kind of girl?", beginning of the blues part with I-IV. This is another one with Mixolydian and Dorian being mingled, this time with A as tonic and again with a full diatonic scale being involved. See the Bongo fury section at "200 Years old" for some more about blues. The pentatonic-Dorian discussion is also coming by in the following two sections from this study:

Burnt weeny sandwich chapter: the pentatonic scale in general.

The Lydian theory by B. Clement: his discussion with me.

D.C. boogie

Both "D.C. boogie" and "Montreal" are guitar solos within a preset framework that incorporates the brass section at various points. The construction of the first half of "D.C. boogie" goes as:

0:00-0:23: introductory bars. The solo spreads out an eastern atmosphere by its strong pedal note scent.

Both Tony Duran on second guitar and the bass guitar keep plucking on the D note.

0:23-3:43: solo in D Mixolydian.

3:43-4:35: Tony moves over from D pedal to a two-chords alternation. The transcription begins with the

last two bars with both the second guitar and the bass playing D pedal. From bar three onwards Tony drops the pedal note and begins playing chords, using D and F#-5 (the overall harmony being D7, including the D-pedal by the bass). This is a sign for the brass to join in gently with a figure (bars 7-9) and to fade out several bars later again. The brass is widening the harmony to D9, while the bass guitar keeps playing D pedal with a lot of 16th notes.

The image displays a handwritten musical score for the piece 'D.C. Boogie'. The score is organized into three systems, each containing three staves. The key signature is one sharp (F#) and the time signature is 4/4.

- System 1 (Bars 1-3):**
 - Staff 1 (Guitar (FZ)):** Labeled with a circled '1' and 'pra-->'. It features a melodic line with accents and a '6' marking under the third bar.
 - Staff 2 (Guitar (Tony Duran)):** Labeled 'mf'. It contains a melodic line with a '3 1' marking under the second bar.
 - Staff 3 (Bass):** Labeled 'mf'. It features a rhythmic pattern of 16th notes with a '3 1' marking under the second bar.
- System 2 (Bars 4-6):**
 - Staff 1:** Continues the melodic line from the first system.
 - Staff 2:** Shows chordal accompaniment with accents.
 - Staff 3:** Continues the 16th-note bass line, with the handwritten note 'Continues like bar 4' written below the staff.
- System 3 (Bars 7-9):**
 - Staff 1:** Continues the melodic line.
 - Staff 2:** Shows chordal accompaniment with accents.
 - Staff 3 (Brass):** Labeled 'Brass' and 'pp'. It features a melodic figure that starts in the second bar and continues through the third bar, with dynamics changing to 'mp' and then 'mf'.
 - Staff 4 (Bass):** Continues the 16th-note bass line, with the handwritten note 'Continues like bar 4' written below the staff.

D.C. Boogie, 3:37-4:04. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

4:35-5:27: The bass goes down an octave with longer notes. The drummer starts beating 16th notes consistently on the bass drum. For the brass this is a sign to come up with their second figure in the background. At 5:06 Zappa turns on a vibrato effect for his guitar for a while. Shortly hereafter the brass draws back.

5:27-6:53: Everybody calms down for the coda. Zappa starts playing around chords. At 5:53 he has reached his final chord. The brass is filling this chord in with various complementary harmonies, thus creating a series of extended chords. At 6:37 the bass and Zappa take the lead again when the brass is playing its final bar. At 6:53 the second half of the song starts, when the audience gets to vote about how to end this song. They go for boogie, but the band must have been prepared for other responses as well.

Farther O'blivion

In 1972 and much of 1973 the band played a medley of three songs with the title "Farther O'blivion". Zappa introduces it this way on "Imaginary diseases". The difference between pronouncing "Farther O'blivion" and "Father O'blivion" (without an r) is hardly audible. On the Beat the boots CD "Piquantique" it's titled "Father O'blivion" and at first I thought that the addition of the r was something the ZFT had come up with to make a difference with "Father O'blivion" from the "Apostrophe (')" album, an entirely different piece.

But in 2013 I encountered a piano part of this piece in Zappa's handwriting with the title "Farther O'blivion" above it. So it was Zappa himself who wrote two different pieces with almost the same title.

The medley consisted of three pieces with solos between them:

- The "swifties, such big swifties" part from "Greggery Peccary". The opening part of this section gets presented below.
- Tuba solo.
- "The be-bop tango". See the Roxy and elsewhere section for this piece.
- Trombone and drum solo.
- "Cucamonga". See the Bongo Fury section for this song (including an example taken from the 1972 "Farther O'blivion" version).

19

Musical score for exercise 19, measures 1-4. It features four staves with treble and bass clefs. The key signature has two flats (Bb, Eb) and the time signature is 3/4. Dynamics include mp, mf, and mf. There are several triplet markings and slurs.

24

Musical score for exercise 24, measures 1-4. It features four staves with treble and bass clefs. The key signature has two flats (Bb, Eb) and the time signature is 3/4. Dynamics include mf and p. There are triplet markings and slurs. The word "vab." is written in the bass staff.

29

Musical score for exercise 29, measures 1-4. It features four staves with treble and bass clefs. The key signature has three sharps (F#, C#, G#) and the time signature is 3/4. Dynamics include p, pp, mf, and mp. There are triplet markings and slurs.

Handwritten musical score for measures 37 and 39. The score is written on five staves (treble and bass clefs) and includes dynamic markings such as *p*, *pp*, *mf*, *mp*, and *pub.* (pianissimo). Measure 37 shows a complex texture with triplets and slurs. Measure 39 features a melodic line in the upper staves and a bass line with triplets and slurs. The notation includes various accidentals and articulation marks.

Farther O'blivion, opening. Transcription: KS, based upon the piano part as included below (update 2013, deposited at the I-depot, The Hague).



Farther O'blivion, opening, piano part. Original score. Notes:

- bar 26: the whole notes are an obvious writing error for dotted half notes.
- bar 40: someone has been writing through this bar, but on album it goes as it is notated by Zappa: 3/4 and no dots behind the half notes.

This transcription of the opening follows the bar numbering as used in the piano part. Apparently the piano enters at bar 13. This piano part wasn't actually played on "Imaginary diseases", that has no keyboard player on it. It's something that happens quite often when you compare Zappa's written scores to album versions: he was always adapting or changing his material. The opening goes as:

- bars 13-19: 3/4 subdivided into two. The lower bass F alters with Eb, the key being F Dorian. Zappa prescribes the Fm9/11 chord or I 11th from F Dorian for the piano. On album you have VII in staff 2 and IV 7th in staff 1, combined creating VII 11th, if I'm hearing it correctly. Thus Zappa specifically wanted an enlarged chord here to sound through bars. Inclusion of the piano would lead to the whole scale sounding (I 13th).
- bar 20: 3/4 on beat. A couple of melodic notes lead to the central motif.
- bar 21: a 3/4 bar subdivided into two again. It contains the central motif: II-I in F Dorian for staff 1. In staff 2 from the piano part you have the I chord sounding all through this bar, thus Zappa is here mingling I and II. Almost the same happens in staves 2-3 from the album.
- bar 22: the meter changes to 4/4. The I chord keeps being held for most of this bar, while the bass plays a little melodic line.
- bar 23: a series of thirds gets played over the I 7th chord. The rhythm follows triplets.
- bar 24: the rhythm now becomes syncopic. The descant and bass alternate, with the bass using a Gb as an altered note (both the piano part and the album version include this Gb).

- bars 25-26: bars 21-22 return, only slightly different.
- bars 27-28: a series of 5th chords, with the rhythm stated predominantly via triplets. At the beginning of bar 27 the lead melody shortly continues in a lower register. The D alters to Db. There's no clear key note for these two bars. At the end a modulation to E Mixolydian gets prepared.
- bars 29-32: 3/4 again. The bass is playing the upwards movement again with a 7th as interval, as in bar 19, now starting with E. The key has become E Mixolydian. Zappa prescribes the Bm11 chord or V 11th from this scale, the chord you also hear when you combine staves 1 and 3 in the transcription (though not complete). The chord continues being sustained for these four bars, so obviously it gave space for the guitar (or someone else) to solo. Staff 2 represents this guitar line (pitch notation as it sounds).
- bars 33-35: switch to C Mixolydian. Once more you see the bass moving upwards a 7th, now starting with C. The guitar solo from staff 2 simply continues in this key. For the piano part Zappa notated Gm11. Unless I'm missing notes, on album it's more the plain C chord.
- bar 36: the first Fsus4 descant piano chord is not taken over at all by the other instruments on album. So bars 35-36 on album might just as well be notated as 4/4 followed by 2/4 instead of two times 3/4. The bass line from beats 2-3 leads us back to the main motif.
- bar 37: third instance of the main motif, now shortened to only one bar, thus without prolonging the I chord for another bar.
- bars 38-40: large sequence of chords for the lead melody, all in a triplet rhythm. It starts off in F Dorian, but soon becomes chromatic. The lead melody is using minor and major thirds, fourths, and - in the piano part - also fifths as intervals for the upper descant part of the chords, so in every aspect these bars are much irregular for their harmonies. In bar 40 the music lands in what might become F# Dorian.
- bars 41-44: The piano part indeed turns to F# Dorian, starting these bars with a lower F# for the bass staff, followed by an E played via syncopes. For the band version it's the other way round for these two notes. The F# appears only once as a higher starting note. Next the bass turns to a lower E and stays there (bars 41 and 42, beat 1, are included in the transcription). So here it's E pedal and the scale becomes E. Zappa didn't prescribe a lead melody for these bars, so here's another opportunity for the guitar to solo, as represented in staff 1 in the transcription.

Little dots

With "Little dots" the ZFT released a third selection with the jazz band playing live. It's a sequel to "Imaginary diseases" with a whole lot of improvisations around vamps, pedal notes and the blues scheme. The composed parts are "Cosmic debris", "Rollo" and the opening of "Little dots", one page of unreleased music. The CD centers around an episode in Columbia, S.C., when the drummer and a horn player got arrested just before the show for taking drugs. Instead of cancelling the concert, Zappa asked Maury Baker to take the place of the drummer. Maury played with Tim Buckley's band, the opening act for Zappa's "Petit Wazoo" tour. Now more than ever the band had to rely upon the improvisations, coming out pretty well on the "Columbia, S.C." track. Part I of this title was entirely improvised on the spot with only some brief indications by Zappa. Part II is using one of the vamps. It shows how easy Zappa could adapt to circumstances during the first half of his career. Something similar happened during the shooting of "200 Motels" with the bass player leaving. The "200 Motels" section from this study shows that scores could be changed on the spot to facilitate the recording if there wasn't enough rehearsing time. In the eighties this policy changed to almost the opposite. In 1984 the production of "Sinister footwear" had become costly, going way over budget (see the Them or us section). Still Zappa didn't find its recording good enough to put it on CD. Many would find the performance acceptable. Instead of finding a new player and reducing the program, in 1988 a whole leg of a tour was cancelled when the bass player was forced to leave.



The CD has one page from "Little dots" printed on the inner sleeve. It's for trumpet #1, addressed to as section "D". In total it comprises 28 bars, of which the image from above is an outtake with bars 13-20. Here you can see that Zappa is experimenting with the rhythm as a musical parameter. The pitches of the smaller notes, the "little dots", are fixed, but their durations aren't made precise. By looking at their position within a bar, the musicians could approach the rhythm. This idea is similar to "Approximate", where Zappa did the same regarding another musical parameter, namely the pitches (see the YCDTOSA II section for examples). In case of "Approximate" the rhythm was fixed and the pitches could be approximated.



Handwritten musical score for 'Little dots #1, section'. The score is written on four staves. The first staff begins with a circled measure number '16'. The music features various rhythmic patterns, including triplets and sixteenth-note runs. Dynamic markings include *pp*, *mf*, *p*, and *mf*. There are also performance instructions such as '>p', '<mf', and '>mf'. A circled '10' appears above a sixteenth-note run in the second and fourth staves. The bottom staff includes a drum part with 'x' marks indicating hits.

Little dots #1, section. Transcription: KS (update Winter 2017, deposited at the I-depot, The Hague).

Handwritten musical score for 'Bva'. The score is written on five staves. The first staff begins with a circled measure number '13' and the label 'Bva'. The music is in 4/4 time and features various rhythmic patterns, including eighth-note runs and rests. Dynamic markings include *mf*, *pp*, and *mf*. There are also performance instructions such as '>p', '<mf', and '>mf'. The bottom staff includes a drum part with 'x' marks indicating hits.

Little dots #2, section. Transcription: KS (update Winter 2017, deposited at the I-depot, The Hague).

This interpretation applies to this sheet music version only however. It's more a rule than exceptional that Zappa's scores differ from their album releases. On the CD this composition appears in two different versions, not only among themselves, but also compared to the score. First at the beginning of part 1 and secondly at the end of part 2. It's partially undoing the rhythm experiment as described above. This is sometimes puzzling, complicating the analysis of Zappa's music. It's not only the conclusion of this study that it's virtually impossible to form theories about Zappa. Even if you would come to an in-depth analysis of only one piece, you have to take into account that this analysis might apply to one specific version only. Some other tapes or scores could turn up, necessitating a differentiation of your analysis. The two CD executions, next to the score example, make it possible to say more about "Little dots". I've limited myself to describing bars 13-19 only.

Common denominators

- All meters in any version are 4/4 with the drummer leading with beating standard 4/4 (and/or possibly Zappa directing).
- The tempo on the CD is fast (the score has no tempo indication). I'd guess as fast as possible, which is the cause of why it sounds erratic in a positive sense. The bars from above last twelve seconds.
- During bars 14 and 17-19 the players are playing prescribed notes (or pausing), though with some freedom, being sustained notes and a 10-tuplet. Zappa also carefully notated the changing dynamics of the sustained notes, something you can hear happening on CD.
- Bars 13 and 15-16 are irregular.
- During the second half of bar 15 most players pause.
- Everything is atonal.

Differences

- Apart from the D flat, the written trumpet part is not recognizable on the CD. Neither the pitches nor the durations of the little dots from the score are played like that on album. With only one sheet, it's not possible for me to construct a midi file of the score version of "Little dots".
- Other than the score with its little dots suggests, the players are following the 4/4 meter during bars 13 and 15. Even their rhythm can go synchronous. The notes and rhythms from version #1 and #2 are

completely different. It's not possible for me to say to what degree these parts are prescribed.

- In bar 16 you can see all these differences as well, but the rhythm is pretty irregular. The players aren't following 4/4, nor are they playing their rhythms synchronous. It's all just irregularly positioned on top of each other. So here the idea of the little dots, with their durations to be approached, comes out the best.

Documentation about the Wazoo bands can be found at <http://fzpond.net/wazoo/>, collected by Charles Ulrich, who also lobbied for the CD releases. For further reading about Zappa's relationship with jazz music and the jazz world you can look into *Zappa and jazz* by Geoff Wills, Troubadour Publishing, 2015. This book starts with quotes of Zappa suggesting that he disliked jazz, but this entire book shows the contrary. Geoff suggests it was more jazz establishment than jazz itself that he disliked. It's just one of many inconsistencies in Zappa's utterances.

The Roxy band (1973-1975)

In 1973 Zappa had formed a band that has become known as the Roxy band. First they recorded two commercially successful albums, *Overnite sensation* and *Apostrophe (')*, the latter briefly reaching #10 in the album charts. With Roxy and elsewhere this band showed that they could play complicated music live. *One size fits all* is a carefully balanced album, one of many examples of bringing together various styles on one release. In 1975 Zappa toured with Don van Vliet a.k.a. Captain Beefheart, his friend from high school days onwards. Their collaboration resulted in *Bongo fury*.

OVERNITE SENSATION: RIFFS

Fed up with the lack of financial means his career had brought him so far, in 1973 Zappa took a new approach to his albums, that was much more in line with what the general public expected of a rock artist. Instead of the recent albums, most of them either instrumental or bizarre story telling pieces, Zappa adapted the normal compiling of an album: a set of songs with lyrics, limited in size, without lengthy soloing. Besides that he took more sight of the spotlights by starting to sing most of his songs himself as far as his voice allowed him to do so. Because he had a limited vocal range, the more versatile parts still had to be sung by others. This, with a lot of deviation allowed, remained the course for the coming years. Thus in 1973 appeared "*Overnite sensation*" (deliberately spelled wrongly) followed by "*Apostrophe (')*" in the next year, both selling well. Apart from being commercially successful, Zappa personally also seemed to be fond of these albums. Most of their tracks exist in live variants as well and he kept including songs from these two albums in every tour since they premiered.

This section and the following one include a couple of examples of riffs from these albums ("*I'm the slime*", "*Dirty love*", "*Don't eat the yellow snow*"). For his more accessible songs Zappa often turned to riffs. Other examples of riffs in this study are for instance:

- *Brown shoes don't make it*, opening riff (Absolutely free section)
- *Tell me you love me* (Chunga's revenge section)
- *Willie the pimp* (Fillmore East section)
- *Eat that question* (Waka/Jawaka section)
- *Titties 'n beer* (New York section)

1. Camarillo Brillo

brass.

Camarillo Brillo, opening. Transcription: KS/Paul Pappas.

In the One size fits all section I'm briefly referring to "Camarillo Brillo" as an example of a two-theme pop-song. In the Ludwig study (see the references) this song also gets mentioned for its verse-chorus structure and its use of common chord progressions. Obviously Zappa wanted to appeal to a larger audience by starting an album like this. The verse-chorus structure is the most common structure in pop music, that also Zappa might use. The universe of different structures he could apply, however, is fascinating. See the One size fits all section for an overview. In 2011 all of the "Overnite sensation" material got published via the Hal Leonard guitar songbook series. It's done very accurately by Paul Pappas. The example above is the opening from "Camarillo Brillo", based upon this transcription and filled in with some more details by me:

"Camarillo Brillo" begins with an instrumental riff in E. It's made up of two bars, that get played four times. The first bars turns up about the same each time, but the second bar gets varied upon. The chord progressions are:

- bars 1, 3, 5 and 7: I-VI 7th-II-I.
- bars 2 and 6: IV 9th-II 7th.
- bar 4: V-IV.
- bar 8: II 7th.

In bar 1 etc. the II and I chords get mingled. The example continues with the verse (bars 10-13). Here the chord progression is I-V-IV-II-VI. This progression gets filled in more and more towards the end with the players improvising along this pattern. The shorter verse gets repeated a couple of times, before the second theme turns up. For this chorus the song first modulates to D. It lasts ten bars in total and doesn't get repeated before the verse returns again. "Camarillo Brillo" is also available in a live version on for instance "Hammersmith Odeon", where Zappa is using the tempo as a variation method. First it gets played much faster than on "Overnite sensation". Halfway it switches to slower.

2. I'm the slime

"I'm the slime" starts with two melodic riffs, followed by Zappa doing a meltdown (speechwise singing) about our TV set (from Beavis and Butthead: Beavis wondering "What were people doing in the old days when there wasn't a TV"? Butthead calms him down: "You dumb ass, there's always been TVs, they only had less channels").

The image shows a handwritten musical score for the song "Camarillo Brillo". It consists of four staves. The top staff is for guitar, the second for bass, the third for drums, and the bottom for another instrument, possibly a second bass or keyboard. The score is in E major (one sharp) and 12/8 time. It begins with a melodic riff in the guitar and bass parts, followed by a drum pattern. The notation includes various rhythmic values, accidentals, and dynamic markings such as "mf". A first ending bracket is visible in the guitar part.

I'm the slime, opening. Transcription: KS (update 2005, 3rd printed edition 2007).

Notes: I'm the slime got transcribed in full by Paul Pappas, Hal Leonard publ. 2011. Bar 1-8 above and his riff A are notational variants. Instead of 12/8 he notates in 4/4 with triplets all the time. His harmony notes of the riff are more accurate and the following corrections on the above are thanks to him: bar 1, beat one, C#+E=>B+E and D#+F#=>C#+F (with staccato accent); bar 2, beat three, F#+A=>G#+A.

Notation:

- ↓ Semi muted, distorted by pick or palm
- ♯ Harmonic (fret indicated) or feedback (indicated)
- + Quarter-tone sharp
- ## Three quarter-tone sharp
- ♭ Quarter-tone flat
- > Accent
- ^ Staccato

This opening starts after a little intro with Zappa improvising on guitar. It's using 12/8 and 4/4 as meters. These two meters last exactly as long, so it's a change of subdivision: four times three becomes four times two. The keys change, but since some notes aren't used, they can't be identified positively. Subsequently they are:

- F# Dorian or minor (the D/D#, that makes the difference, fails).
- E Dorian or Mixolydian. The G/G# isn't used, at least I'm not hearing it. Paul Pappas indicates an E chord, thus going for the Mixolydian harmony.
- D Dorian. The instrumental opening does end positively with modulating towards D Dorian, the key the verse starts with.

Outro-Guitar Solo

Gtr. 5 tacet

The musical score consists of two staves of music. The first staff begins with a treble clef, a key signature of one sharp (F#), and a common time signature. Above the staff, the chords F#m7, B, D, and E are written. The music features a series of eighth notes and quarter notes, with some triplets and sixteenth notes. The second staff continues the melody, also with a treble clef and one sharp key signature. Above this staff, the chords F#m7, B, D, and E are again indicated. The music continues with similar rhythmic patterns, including triplets and sixteenth notes. The score is labeled 'Gtr. 5 tacet' at the beginning.

The song ends with a guitar solo, maintaining the ambiguity about being in F# Dorian or minor. Now both the D natural and D sharp are being used by the accompanying B and D chords. Above the first four bars of this solo (source: Overnite sensation guitar book, the meter is 4/4). At this point the soloing avoids the D/D#, at some other points Zappa himself plays a D#, also when the accompanying chord is D.

3. Dirty love

The main theme from "Dirty love" is following a riff with two alternating chords, being I-VII in D Mixolydian. At 0:28 a second theme starts, following a parallel movement of three major type of chords (C, D and E7).

1

The score is written in G major (one sharp) and 4/4 time. It is divided into three systems of four staves each.

- System 1:**
 - Staff 1: Bass line starting with a sixteenth-note triplet (B4, C5, D5) and a sixteenth note (E5).
 - Staff 2: Guitar with a tremolo effect (tr) and a sixteenth-note triplet (B4, C5, D5) followed by a sixteenth note (E5).
 - Staff 3: Bass line with a sixteenth-note triplet (B4, C5, D5) and a sixteenth note (E5).
 - Staff 4: Drums with a bass drum and snare pattern.
- System 2:**
 - Staff 1: Bass line with lyrics: "mf Give me your dirty love, trm Like".
 - Staff 2: Guitar with lyrics: "As bar 2", "As bar 1", and "As bar 1".
 - Staff 3: Bass line with lyrics: "As bar 2", "As bar 1", and "As bar 1".
 - Staff 4: Drums with lyrics: "As bar 2", "As bar 1", and "As bar 1".
- System 3:**
 - Staff 1: Bass line with triplets (L-3) and a triplet (3-7) leading to a triplet (3) and a triplet (3).
 - Staff 2: Guitar with a triplet (3) and a triplet (3).
 - Staff 3: Bass line with a triplet (3) and a triplet (3).
 - Staff 4: Drums with a triplet (3) and a triplet (3).

Dirty love, opening. Transcription: Paul Pappas (Guitar, February 1994).

Note: the printed versions 1-3 of this study have a little transcription by me, but in 2011 I found that the entire Paul Pappas transcription of Dirty Love had already been published in Guitar, February 1994. That one is also more accurately done regarding details. As it comes to the sextuplet: I don't manage to hear these notes separately.

Half-way this song you can hear a little guitar solo. During both "I'm the slime" and "Dirty love", Zappa is playing over chord progressions. For the "I'm the slime" outro the chords F#m7, E, D and B are used in varying patterns. In case of "Dirty love" he continues with the progressions from the two themes of this song. This is the most common manner of playing a solo in pop music, but in case of Zappa pretty rare. See also the Guitar section.

The image displays a musical score for the guitar part of "Dirty Love". It is organized into three systems, each with a treble clef staff and a bass clef staff. Above the first system, the chords C and Cm7 are indicated. The first system features three staves: Gtr. 4 (top), Gtr. 5 (middle), and Gtr. 1 (bottom). The second system has chords Dm7, E9sus4, and N.C. above it. The third system has chords D, N.C., C, and N.C. above it. The score includes various musical notations such as slurs, ties, and a sextuplet. At the end of the third system, the lyrics "3, Give me _" are written below the staff.

Dirty love, end of the guitar solo. Source: Overnite sensation guitar book (the meter is 4/4).

As indicated by Paul Pappas, the first four bars from the example above follow C-Cm7-Dm7-E9sus4,

similar, though not identical, to theme 2. Bars five and six are using D-C, as in the first example from above. As a guitar book everything gets notated for guitars. Guitar 4 is Zappa soloing. The other guitars represent the accompaniment. The bass part normally isn't included in the Hal Leonard series, but can to a point be derived as the root note of the indicated chords.

4. Fifty-fifty

On the two albums of this section and the next one, "Fifty-fifty" is the only track where Zappa isn't singing himself. It would have asked too much of his voice. The pitch range is wide and during the song the lead singer, Ricky Lancelotti, is deliberately yelling. Zappa apparently liked him to do so and wrote the lyrics to go along with it ("I know my voice is kapoot"). Yelling is something Zappa himself never does on his albums, hardly ever even raising his voice. During the song you have a large instrumental middle block for three sequent solos. All three follow the same modulation pattern, with as its basis:

- 8 bars alternating C Mixolydian and Db Mixolydian.

- 8 bars alternating Ab Mixolydian and Cb Mixolydian. In all bars the bass is playing the tonic as pedal note and the accompanying chords are mostly larger chords (7th to 11th) with the tonic as root. Only in the final 16th bar the bass moves over to Eb.

- 8 bars again alternating C Mixolydian and Db Mixolydian.

- 8 bars again alternating Ab Mixolydian and Cb Mixolydian.

The three solo out-takes below are bars 5-10 plus the beginning of bar 11 from this scheme, that lasts 32 bars in total. Thus these corresponding blocks present the same section as played by the three solo players. The scales are followed by the soloists with a lot of freedom. The first organ solo example below begins with George Duke playing as fast as he can over a C Mixolydian accompaniment, using the chromatic scale. Notes over the Db pedal bars can also get altered. Especially Zappa alters notes consistently during his solo. Over the C pedal bars he changes the E to Eb, thus mingling C Mixolydian with C Dorian. Over the Db pedal bars he always uses a C natural instead of a Cb and half of the time the Gb also gets altered to G natural. So here Db Mixolydian gets mixed with Db major and Db Lydian.

The structure of "Fifty-fifty" goes as:

- 0:00 Instrumental intro in D Dorian.

- 0:15 Theme A, at first continuing in D Dorian.

The first half of theme A is a phrase of two bars over a bass pattern, playing around D-F-D-G. This phrase gets varied upon four times. The transcription below begins with the last three variations. The second half begins at the end of bar 6, where the varying upon the previous phrase is left and the music briefly moves over to Eb Dorian. Halfway bar 8 and during bar 9 the chords Em7, Em7-5 and C#m7-5 are used, not particularly staying in a specific key. The last C#m7-5 gets extended by an additional F by the bass played beneath it.

1

I
mf know I ain't cute--

mf

p

dvab. mf

5

Synth. rush

mp

dvab.

Fifty-fifty, theme A. Transcription: KS (details, bass)/Paul Pappas (basis). Update 2013, deposited at the I-depot, The Hague.

- 0:40 Theme B. See the example at the end, where this theme returns instrumentally as the coda for this song. In the repetitions of this theme below, the harmonies come out better. Here it's more melody and bass only.
- 0:56 Theme A again. The bass pattern returns in the same manner, but the melody gets harmonized differently.
- 1:22 Theme B again, now with chords.
- 1:38 Organ solo by George Duke. This solo and the next two follow the pattern as described above.
- 2:36 Violin solo by Jean-Luc Ponty.
- 3:35 Guitar solo by Zappa.

The image shows a handwritten musical score for an organ solo section, divided into three systems. The first system is marked with a circled '1' and includes a bracketed section labeled 'Organ' with the instruction 'parallel octaves'. It features six staves: the top two are treble clef, and the bottom two are bass clef. The first two staves contain sixteenth-note runs with '6' (sixteenth notes) and 'Etc.' markings. The third staff has triplet markings and 'imp' dynamics. The fourth staff is labeled 'Evab. mf'. The second system is marked with a circled '3' and includes a treble clef staff with triplet markings and a bass clef staff with 'Evab.' and 'mf' markings. The third system is marked with a circled '6' and includes a treble clef staff with triplet markings and a bass clef staff with 'mp' and 'mf mp' markings. The score includes various dynamic markings such as 'mf', 'imp', and 'mp', and performance instructions like 'parallel octaves' and 'Evab.'. The key signature changes from one flat to two flats, and the time signature is 4/4.

Fifty-fifty, organ solo section. Transcription: KS (update 2013, deposited at the I-depot, The Hague). Note: the Cb Mixolydian part would normally be notated as B Mixolydian with four sharps. Cb Mixolydian reads difficult, especially since it involves a B double-flat, but changing from a larger number of flats to a larger number of sharps doesn't look nice neither. So I went along Paul Pappa's choice for Cb in the guitar book (as a guitar book this book offers the guitar accompanying chords only for solos not by Zappa).

The image displays a handwritten musical score for a violin solo section, consisting of three systems of music. Each system is marked with a boxed number: [1], [4], and [7].

- System 1:** Features a treble clef staff with a melody starting on a quarter rest, followed by eighth notes. The dynamic is *mf*. A fermata is placed over the first measure, with a '9' above it. The bass clef staff provides accompaniment with chords and eighth notes, marked *mp*. A triplet of eighth notes is indicated in the second measure.
- System 2:** Continues the melody in the treble clef, marked *mf*. The bass clef staff continues the accompaniment, marked *mp*. A triplet of eighth notes is present in the second measure.
- System 3:** Shows the final measures of the section. The treble clef staff has a triplet of eighth notes in the second measure. The bass clef staff continues the accompaniment.

The score includes various musical notations such as rests, eighth notes, chords, and triplets. The key signature changes from two flats to one flat and back to two flats. The dynamics are *mf* and *mp*.

Fifty-fifty, violin solo section. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

The image shows a handwritten musical score for a guitar solo section. It consists of three systems of staves. Each system includes a guitar staff, a piano accompaniment staff, and a bass staff. The score is marked with dynamics like *mf*, *pp*, and *p*, and includes performance instructions such as "8va" and "3". The key signature is C Phrygian (one flat) and the time signature is 4/4. The first system is labeled "1 Guitar" and the second "3". The third system is labeled "6".

Fifty-fifty, guitar solo section. Transcription: KS/Paul Pappas (update 2013, deposited at the I-depot, The Hague).

- 4:40 Theme A.
- 5:06 Theme B.
- 5:24 Theme A instrumentally.
- 5:49 Theme B instrumentally. Bars 1-4 are in C Phrygian. For bars 1-3 Zappa is using extended chords, I 11th for instance on beat 2 of bar 1. From bar 4 onwards the chords are all standard triads. For the closing bars the music moves over to E Lydian. Bar 6 continues for a couple of seconds with improvised notes till the song ends.

Fifty-fifty, theme B. Transcription: Paul Pappas/KS (update 2013, deposited at the I-depot, The Hague).

- 6:09 End

5. Zomby woof

"Zomby woof" gets represented three times in Zappa's catalogue. The 1988 live version gets dealt with amply in the Best band you never heard in your life section, where I'm describing the structure of this song. Examples from the opening and the guitar solo are included. Stylistically it's the most complicated song from "Overnite sensation".



Above the opening of the guitar solo from "Zomby woof" (1973), as transcribed by Paul Pappas (the meter is 4/4). As it comes to their themes, the three "Zomby woof" versions are basically the same. Some detail differences are pointed at in the Best band you never heard in your life section, where you can also find a sample from the 1988 solo. These solos are the main difference between the three versions. All three are in A Dorian, this one over a bass pedal note, the 1988 rendition over a vamp. As about always they get improvised anew on the spot. As also mentioned below at "Dinah-Moe Humm", Paul notates the solo as if in minor, a convention in the Hal Leonard series. When the F/F# turns up, it's mostly as the F# from A Dorian. In the example above the F/F# is still avoided.

6. Dinah-Moe Humm

"Dinah-Moe Humm" has become more famous for its lyrics than for its music. The original side two of the vinyl album corresponds with tracks 5-7 on the CD. It's all surreal fiction, humoristic, and it can be seen as a form of literature.

Dinah-Moe Humm, main theme. Transcription: KS/Paul Pappas (update 2019, deposited at the I-depot, The Hague).

The main theme from "Dinah-Moe Humm" is another example of major chords being played parallel. It's diatonic music, but not following one particular scale. Instead it's touching upon a couple of major type scales, with notes getting altered all the time. This situation has been addressed too as well in the Freak out and YCDTOSA Vol. II sections from this study, with some more remarks in the modulation paragraph from the Studio tan section. As indicated in the Overnite sensation guitar book, the basic chord progression in bars 1-2 and 5-8 is E-F#-E-D-A-E-F#-G-G7-D7-B7. It's getting played around in the example above, a rather literal reproduction of how the main theme is played between 0:08 and 0:24. In the guitar book the main theme gets notated as in E, which I'm following here.

Bars 3-4 are there to break the pattern, something Zappa liked to do. It's a little atonal sequence, its irregularity being stressed by its accompanying chords. The minor-seCONDS distances between the subsequent notes are +1+8-8+1+9-9+1+9-9+1+10-1, so this atonal melody does have some form of a pattern by itself (plus is going up, minus is going down). The bass line is chromatically moving down

from A to F#. Rhythmically it stays in standard 4/4. The second midi file from the on-line version contains the main theme without these interrupting bars. One has become used to their presence, but this is how the main theme would sound in a more regular pop-like way.

Following the guitar book, the global structure of "Dinah-Moe Humm" goes as:

- 0:00 Intro with drums and the E-chord by a rhythm guitar.
- 0:08 Verse (main theme from above), being played three times.
- 0:57 Chorus, appearing only once during the song.
- 1:10 Interlude (Dinah-Moe speaking).
- 1:42 Bridge, being the Dinah-Moe and her sister story, with a sample from it shown below.
- 4:49 Drums and rhythm guitar as at the beginning.
- 4:57 The verse returns.
- 5:26 Outro.

The image shows two staves of musical notation. The top staff is a vocal line in G major (one sharp) and 4/4 time. It contains the lyrics: "buns - up - kneel - in'. (Buns up! I was wheel - in' an' deal - in'." The bottom staff is a guitar accompaniment, also in G major and 4/4 time. It contains the lyrics: "Wheel - in' an' deal - in' and ooh. She sur - ren - der to the feel - in', She sweet - ly sur - ren - dered.)". The notation includes various musical symbols such as notes, rests, and accidentals.

Sample from the Overnite sensation Guitar book, page 81, with Zappa speech-wise singing and vocal harmonies by the Ikettes.

The meter is 4/4 and the accompanying riff (page 79) is pulsing an Em chord. The bass, playing along the Em chord, is mostly giving an E pedal, the key at this point thus being E Dorian. It's a convention in the Hal Leonard guitar book series to always notate songs as if in major or minor. Because Zappa actually composes modally, you have to be aware of this manner of notation.

Zappa kept performing "Dinah-Moe Humm" live as well, but the studio version works out better for its finesses, lying in the background vocals and comments by the Ikettes. He has sometimes been accused of being women-unfriendly. In case of "Dinah-Moe Humm" this gets compensated by its wit, but the subject of songs like "Dirty love" and "Bamboozled by love" can be called ugly or insensitive. Zappa standard defense would be that he had a right to write about anything happening in society and that his songs could be unfriendly towards males as well.

7. Montana

One can also encounter riffs in far more complex environments as the bass movement in bar 7 of "Montana", the closing song for "Overnite sensation" with amusing absurd lyrics about growing dental floss.

1

2

3

Pvabassa

Bar 2 repeats, followed by

two bars of drum soloing

Asbass

4

I might be...

Repeats

Repeats

Pvabassa

Repeats

Pvabassa

Montana, opening. Transcription: KS (3rd printed edition 2007; a few details corrected in 2015).
 Note: Montana got transcribed in full by Paul Pappas, Hal Leonard publ. 2011.

(a) Introduction (*Over-nite Sensation*)

Melody

Bass

Lydian system: A
Pedal: A Lydian

The opening bars as shown in the Clement study (2009, page 325). See his own study or the left menu of this site for what he means by a Lydian system.

Intro
Moderately slow ♩ = 88

***A

f

*Gtr. 1

Gtr. 2 (dist.)
divisi

**Gtr. 3

f

(Drums) 2

The opening bars as represented in the Overnite sensation guitar book. It's a convention in the Hal Leonard series to notate songs in major or minor. In this case A major. With the G always being natural, the actual key is modal, better described as A Mixolydian.

1

These opening bars again, notated as A Lydian. The altered notes, ensuing from this notation, are

encircled.



Idem as A Mixolydian.

The set-up of this song goes as:

0:00 Instrumental intro of 4 bars in A Mixolydian.

In his 2009 study Brett Clement looks at the melodic line and bass only and identifies it as A Lydian. Presented like this it indeed looks like that. When you include the harmony notes it gets different. In his response to me, however, you can read that Brett wishes to maintain his interpretation: "there's a melodic D# which is clearly part of the theme; the accompanimental G and C are just there to create parallel major triads, with the melodic note functioning as the chordal third". In my interpretation it's more likely that Brett simply forgot to listen to the harmony notes and got too eager to call it Lydian. Brett: "Why? The "main" diatonic collection for a large portion of that song is clearly 4#, which appears as B Mixolydian in the verse and F# Dorian in the solo. Therefore, when the theme appears in the introduction over an A pedal, I analyze that as the Lydian pedal of the 4# diatonic system. In other words, I read the harmony note G as a nonscale tone, whereas Sloots analyzes the melodic D# as a non-scale tone."

It is true that what you're seeing here is a form of parallel chords (which is common in Zappa's music), and this is causing quite some altered notes to be present, whatever scale you choose. In situations like this one should simply look for the best fitting scale (following the Guitar book presentation):

- A major: 25 notes are altered.
- A Mixolydian: 12 notes are altered.
- A Lydian: 30 notes are altered.

Quite obviously A Mixolydian is the scale that suits the best (encircled notation examples are included below). To my ears in such a degree that the D# in bar 3 also really sounds as an altered note.

0:10 Two bars of drum soloing.

0:15 Verse:

- phrase 1: 4 bars in B Mixolydian with the chord progression basically being two times VII-I. These chords are mostly not played as triads, but get extended with additional notes and passing-through notes. At the beginning these chords are played softly in the background, but they come out more accentuated in the third Montana example below.

- phrase 2: 4 bars in A Mixolydian.

- phrase 1: 2 bars, transposed up a minor second, thus in C Mixolydian.

- phrase 3: chord progression, being Em-A-Dm-G.

0:48 Smaller interlude.

1:00 Verse restarts.

1:33 Chorus of four bars, played twice (B Mixolydian).

1:55 Guitar solo in F# Dorian.

3:23 Larger interlude.

Handwritten musical score for 'Montana' by Frank Zappa. The score is in treble and bass clefs, key of D major (two sharps), and 4/4 time. It consists of four systems of two staves each. The first system includes the word 'Repeats' in the bass staff. The notation features various rhythmic patterns, including triplets and sixteenth notes, and includes the name 'Bvabassa' written in the bass staff of each system.

Montana, section. Transcription: KS (3rd printed edition 2007).

Kenny Kessel wrote me about some detail errors I first had:

- Bar 5 beat 2 should have the same rhythm as bar 1 beat 2 ("ridin' a small" goes like "pluckin' the ol").
- Bar 8 beat 2: I miswrote myself here, some F# notes are E#. The text has "saddle" on D#, so there must be two D# notes (the second one hardly audible).
- Bar 10 beat 2 should have a double B as well.

At the time Zappa was recording this album, Ike and Tina Turner and the Ikettes were recording in the same studio. Zappa was looking for back-up vocalists and was surprised that Tina and the Ikettes were willing to do the job. It is often said that Zappa brings out the best in musicians and that's what's happening here. Tina and the Ikettes felt challenged by the vocal part in the middle of the song, partly transcribed above.

With parallel octaves

I'm plucking--

--folks.

I'm gonna--

7:8

The image shows a handwritten musical score for a section titled "Montana". It consists of three systems of staves. The first system has four staves: two for guitar (treble and bass clefs) and two for bass (treble and bass clefs). The second system also has four staves, with the top two for guitar and the bottom two for bass. The third system has four staves, with the top two for guitar and the bottom two for bass. The score includes various musical notations such as triplets, sixteenth notes, and rests. There are also handwritten annotations like "With parallel octaves", "I'm plucking--", "--folks.", and "I'm gonna--". A time signature change to 7:8 is indicated in the third system. The piece is in the key of D major (two sharps) and 4/4 time.

Montana, section. Transcription: Paul Pappas (basis)/KS (bass and several details). Update Winter 2015, deposited at the I-depot, The Hague.

Zappa: "It was so difficult, that one part in the middle of the song "Montana", that the three girls rehearsed it for a couple of days. Just that one section. You know the part that goes "I'm pluckin' the ol' dennil floss..."? Right in the middle there. And one of the harmony singers got it first. She came out and sang her part and the other girls had to follow her track. Tina was so pleased that she was able to sing this that she went into the next studio where Ike was working and dragged him into the studio to hear the result of her labour. He listened to the tape and he goes, "What is this shit?" and walked out" (quote taken over from Barry Miles' biography). Ike refused the name of the Ikettes being used for credits. On this occasion they were Tina Turner, Linda Sims and Debbie Wilson (see the "Overnite Sensation/Apostrophe (')" DVD at 20:12 minutes for the bill). Zappa is in much of Montana again singing a meltdown, opposed to the highly flexible lyrics by Tina and the Ikettes. The transcription shows on paper how difficult indeed their part is. It has constantly changing rhythms, strings of fast notes and unorthodox harmonic progressions, using all intervals. It's played in the form of a two-part counterpoint by the descant and the bass. It's diatonic material, but with the bass moving all the time and a couple of notes switching between natural and sharp, it's impossible to assign bars to keys. There are hardly chords in this part.

4:07 Verse again.

4:41 Smaller interlude.

4:52 Verse restarts.

5:26 Chorus variant as outro.

6:34 End.