FRANK ZAPPA'S MUSICAL LANGUAGE 5^{TH} EDITION, SPRING 2020

Three-volumes version: VOLUME II

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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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 a 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 to often to verify all instances. The text can refer to midi files and images that are available on-line only.

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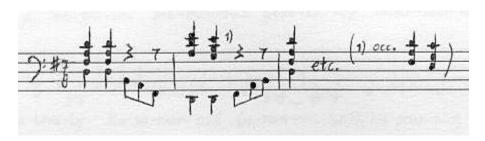
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APOSTROPHE ('): COLLABORATIONS

With "Apostrophe (')" Zappa continued the success he had with "Overnite sensation". Every now and then he would co-write a song with band members. "Apostrophe (')" contains two of them. Others included in this study are "Scum bag" and "No more Mr. nice guy". The title track stems from a 1972 recording session. Originally this song carried the title "Energy frontier", with "Down in the dew" as the main theme and "Apostrophe (')" as a large interlude. More from this session is included in the ZFT release "The crux of the biscuit", with alternative recordings and mixes of most "Apostrophe (')" tracks. "Down in the dew" only got postumely released on "Läther". It looks like Zappa aimed at "Apostrophe (')" being commercial, because the more complex songs he had in stock got skipped. He convinced Warner Bros. to advertise for it on TV. He was so delighted when this album reached number 10 in the LP chart, that he let a marching band parade in front of their office. The "Crux of the biscuit" CD booklet contains photos of this event as well as of the Billboard top LPs list.

1. Don't eat the yellow snow

The riff from "Don't eat the yellow snow" from "Apostrophe (')" is using the chord progression I-I-I-II 7th (occ. VII 9th) in D Mixolydian (bass included in these chords).



Don't eat that yellow snow, riff. Transcription: KS (1st printed edition, 2000). Note: Don't eat that yellow snow got transcribed in full in 2002 by Andy Aledort (Hal Leonard publications).

There are three live versions of "Don't eat the yellow" available, performed as a suite. To the right: Napoleon Murphy Brock and Zappa in the studio, 1974, rehearsing "Don't eat the yellow" in the Australia version (source: Roxy, the movie DVD). This suite is made up of tracks 1-4 from "Apostrophe (')" with some extras:

One shot deal: Australian yellow snow

- 0:00 Don't eat the yellow, Australia version with the instrumental intro skipped.
- 0:57 Nanook rubs it.
- 7:41 St. Alfonso's pancake breakfast. According to the Crux of the biscuit liner notes the sung version of "Father O'blivion" was included in this performance, but omitted from the CD edit (like the "Don't eat the yellow" intro). The next suite is presented as the full version of how it was performed in Australia.
- 8:40 The MAR-JUH-RENE spelling event.
- 12:26 End.

The crux of the biscuit: Don't eat the yellow snow/St. Alfonso's pancake breakfast

- 0:00 Don't eat the yellow, Australia version incl. the instrumental intro.
- 1:10 Nanook rubs it.
- 6:50 St. Alfonso's pancake breakfast.
- 8:58 Father O'blivion.

- 11:24 St. Alfonso's pancake breakfast, played faster.
- 12:26 The MAR-JUH-RENE spelling event. See the liner notes for a detailed description of the event.
- 16:06 The band soloing in mostly G Dorian, followed by the Father O'blivion text, spoken by Zappa over a bass G pedal note.
- 18:54 "Join the march and eat my starch". A section from the later "Greggery Peccary" composition, with some bars included in this study as the second example from this piece.
- 19:24 End.

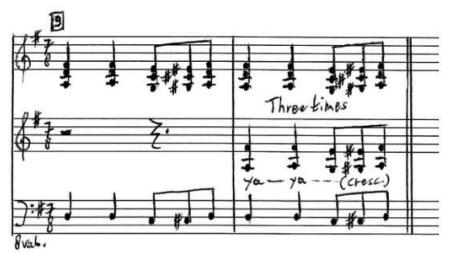
YCDTOSA Vol. I: Don't eat that yellow snow (February 1979)

- 0:00 Don't eat the yellow. Again a slightly different version: the descending bass riff is played parallel on guitar with the chords turning up explicitly only at 1:18. There are quite some alternative bars to make this version of interest, like the "you don't really look like an Eskimo" line. A little instrumental add-in is included towards the end (2:04-2:16).
- 2:25 Nanook rubs it incl. the fur trapper pounding and poetry reciting event.
- 13:23 St. Alfonso's pancake breakfast.
- 15:11 Father O'blivion.
- 17:26 Rollo variant.
- 20:16 End

The first two suites are taken from two subsequent shows the band played in Australia, June 1973. It has a pretty different version of "Don't eat that yellow". Performed like this it could never have been the album opener of "Apostrophe (')", because it doesn't begin with the catching riff of this song.







Don't eat that yellow snow, Australia, opening. Transcription: KS (update autumn 2016, deposited at the I-depot, The Hague).



Don't eat that yellow snow, Australia, patterns from the opening bars.

"Don't eat that yellow snow" (Australia) begins as an instrumental with the example from above (0:00 through 0:27). During the years 1973-74 Zappa experimented with irregular note strings to be played as fast as possible. The title of "Approximate" refers to this and the score of this song compared to the live performance shows how it worked. See the YCDTOSA Vol. II section. The band had to follow the rhythm and the direction of the string, but the individual pitches of the notes were left at choice. I can't absolutely proof that this is also happening here, but that this is the case is quite obvious. In bars 1 and 6 the band members are following the same movement but with different chromatic notes. These bars get repeated,

but not identically. The recording is not bright enough to notate everything per player. It's transcribed by approximation with the notes reasonably audible in it. It goes as:

- Bar 1: a string lasting 30/16, following pattern 1. The band members play it chromatically, beginning on different pitches. It's totally atonal with harmonies being created at random, but the pattern comes out clearly.
- Bars 2-5: a normal pop music figure in 4/4. It's a repeated bar with I-VII-II in D Lydian.
- Bar 6: another string lasting 30/16, this time following pattern 2. The descant players end with a note during up to a whole note. This space is filled in by the bass and drum.
- Bars 7-8: patterns 2 and 1 get repeated.
- Bars 9-12: the main "Don't eat that yellow snow" riff. It's a different version of the above example regarding the chords and bass line. It's also in 7/8 and in D Mixolydian, but the construction and harmony are a more basic progression of triads: D-D-C-C#-D or I-VII with a chromatic passing chord between them. Other than above, the directions of the bass and chords are played parallel. This is done to let the riff turn into a vamp for the remainder of the song, while on the "Apostrophe (')" CD the riff is the core of the song. It's tuned down with Zappa speech-wise singing the lyrics, much shorter than on the "Apostrophe (')" CD.

2. Nanook rubs it

In most of "Nanook rubs it" a bass riff of two bars is used as a vamp. Only at the beginning there are some pattern breaking bars in 4/8, for the remainder the bass keeps vamping. It's a relaxed song in a slow 6/8 meter with Zappa sometimes speechwise singing and sometimes normally singing about the clash between a fur trapper and an eskimo. As the song progresses short guitar solo comments and an interlude ("no, no, I can't see") pass by. The vamp is used at length in the 1979 live version on "You can't do that on stage anymore, vol. I", where it is accompanying the pouncing and poetry reciting event.

The basis of the following transcription is by Andy Aledort, published in 2002, Hal Leonard series. His scores are arrangements for guitars. For my on-line midi file I made some adaptations on it:

- Inclusion of the bass part. Andy normally doesn't transcribe the bass part, but indicates it here as a D#m7 and B9 chord alternation. Apparently this is a convention in the Hal Leonard series.
- Pitches of some parts I think are different (a fur..., strictly..., peek...).
- The 4/4 bars are an obvious writing error for 4/8 bars.
- In the spoken parts I think Zappa speaks more flatly and the rhythm is more irregular. Maybe you'd need to resort to quarter tones as well.
- Andy notates the key as normal D sharp Minor. This appears to be another convention in the Hal Leonard series (songs are notated in major or minor, also when the actual scale is modal). Since the E is always played natural I've notated no E sharp in the presets (the key is then modal, D sharp Phrygian).

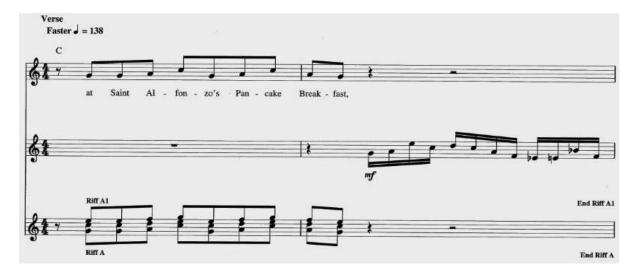




Nanook rubs it, opening. Transcription: Andy Aledort, with some modifications by KS.

3-4. St. Alfonso's pancake breakfast - Father O'blivion - Rollo interior

"St. Alfonso's pancake breakfast" begins with an instrumental intro portraying the fur trapper's journey through the tundra, heading for the parish of St. Alfonso. It ends with Zappa commenting "yes, indeed, here we are", which makes it clear it should be interpreted in this manner.



Next phrase one from the verse begins as shown above (sample from the Apostrophe guitar book). It sets off in C in standard 4/4, while the intro is using varying meters (4/4, 3/4, 4/4, 13/16, 4/4 and 2/4, following the guitar book). Characteristic of the verse are the little instrumental interruptions of the sung

part, like in the second bar from the example above. These can contain chromatic elements.



To the right a section of a screenshot of Ruth Underwood showing her copy of the "Rollo interior" lead sheet, handwritten by Zappa (source: "Overnite sensation/Apostrophe(')" DVD). She expresses how Zappa pushed the right buttons by writing pieces like this, exactly what she wished to play. Next she evolves about the 2-chords he prescribed for the harmony, contrary to the more usual triads (in this study these chords can also get called 9th and 5th chords respectively). "Rollo interior" got used as the second instrumental half of "St. Alfonso's pancake breakfast" on "Apostrophe(')", leaving the harmony chords out or mixed to the background where I

cannot hear them no more. The same happened to "The black page". Apparently Ruth liked the presence of these chords in Zappa's music a lot. In the "Roxy by proxy" CD liner notes she continues as "[...], the very chords that had always attracted me to FZ's music and that gave it such a distinctive sound". Zappa does indeed use sus2-chords - and sus4-chords - more than average. To mention some instances of sus2-chords from my study:

- "Peaches on regalia", bar 7.
- "Little umbrellas", 1st example, staff 2.
- "Little house I used to live in", melody during bars 27-30 (F#-G#-C#).
- "Rollo", bars 15-16, staff 1.
- The example Ruth plays on the "Overnite sensation/Apostrophe(')" DVD is from the "Idiot bastard son" (see the YCDTOSA II section), a clear example of Zappa using 2-chords.
- "Punky's whips", chord from the 33/32 bar.
- "No more Mr. nice girl", outchorus.
- "Alien orifice", 1st example, accompanying chords.
- "One man one vote".
- "Outrage at Valdez", opening bar (F-G-C).

Some more on this subject in the Zappa in New York section at the Black page #1 with Ruth's piano version of this piece. She started working with Zappa as a percussionist on "Uncle meat". In 1972 she joined the Mothers as a steady member, taking her marimba with her on the road. Zappa already had used vibes and similar percussion instruments for playing lead melodies, and with Ruth in the band for five years, the relatively uncommon marimba grew out as a trademark of Zappa's instrumentation during that period.

Next are the closing bars of "St. Alfonso's pancake breakfast", segued by the opening of "Father O'blivion". Both are complex songs on an album that mostly is accessible, that is to say for Zappa standards. They contain constantly changing themes, meters, rhythms, keys and tempi. The example discussed here is based upon Andy Aledort's 2002 "Apostrophe(')" songbook, who got commissioned to transcribe all of this album (thus including the solos).





St. Alfonso/Father O'blivion, transition. Transcription: Andy Aledort (some additions by KS, like the bass and the 7/16 bar).

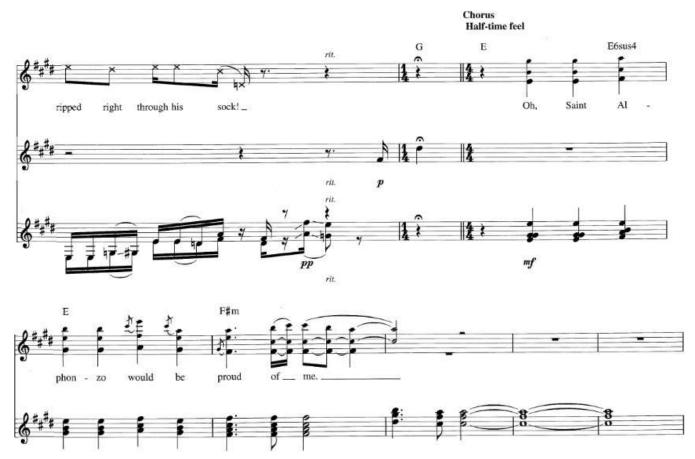
Note: later on I noticed via Ruth's copy, shown on the DVD, that Zappa himself had notated the interlude in 2/4 instead of 4/4. See the sample in the main text of this section. It's not that important a difference.

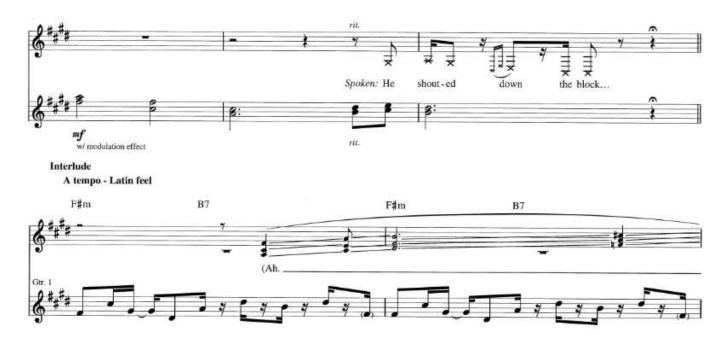
St. Alfonso part of the transcription:

- Bars 1-6: the ending of the so-called "Rollo interior" section (see also "Rollo" from the Wazoo section). A highly irregular melody. It does use diatonic material from various scales, but without key notes. The bass keeps moving freely with a counterpoint line and virtually nowhere traditional chords are formed. The rhythm however is constant: an ongoing stream of 16th notes. As the sheet Ruth is holding during the DVD shows, everything is prescribed, thus also the bass line (sample below).
- Bars 7-9: closing bars from "St. Alfonso", forming a transition to "Father O'blivion". *Father O'blivion part*:
- Bars 1-8: instrumental opening in E Mixolydian with a guitar lick. It gets joined with a second lick in bars 5-8.

- Bars 9-14: main theme. The first guitar lick stops, the second lick now gets accompanied by the bass. Bars 15-18: second theme in varying meters.





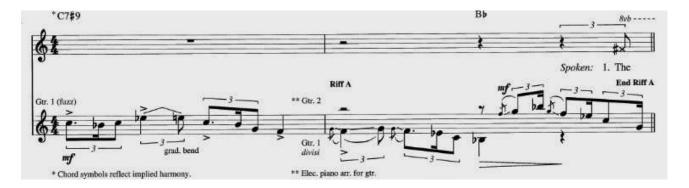


Father O'blivion, chorus and interlude. Transcription: Andy Aledort.

The second example above is from the middle of "Father O'blivion", a sample from the Apostrophe guitar book. The chorus part is about the only section from this song that is in straightforward on-beat 4/4. Most other parts include syncopes or strings of 16th notes. It begins in E. It gets followed by a little interlude using a Latin type of rhythm. It has a syncope between beats 1 and 2, while beats 3 and 4 are off-beat. At this point the song is in F# Dorian.

5. Cosmic debris

"Cosmic debris" gets described by Ludwig on page 218 of his study. It includes a standard blues guitar solo. The scores of all songs from "Apostrophe (')" are available as the Apostrophe (') guitar book from the Hal Leonard series. As already mentioned, the transcriptions are done by Andy Aledort, who earlier transcribed "Hot rats" as well.



Sample from the Apostrophe (') guitar book with the opening lick from "Cosmic debris".

The opening lick is in C Dorian, as is the guitar solo. The "Crux of the biscuit" release by the ZFT has this lick first being played by brass instruments. It lasts six seconds and got edited out for the album. In this

version the chords aren't only implied as with the guitar intro from above (C7#9 and Bb, with the asterisk saying that these chords are implied). The bass keep giving an C as pedal note. Over this the harmony goes as:

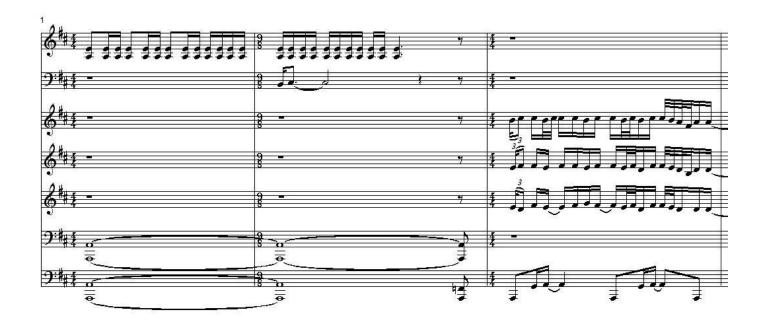
- bar 1, beat 1: C7.
- bar 1, beat 2: Eb.
- bar 1, beat 3: C7.
- bar 1, beat 4 through bar 2, beat 1: G-C-F (stacked fourth).
- bar 2, beat 2, tick 2: C.
- bar 2, beat 3-4: Bbsus 2.

So the implicated chords by Andy happen to be in line with how the band actually played this at the time Zappa had it harmonized. This also means that my remark that this lick is in C Dorian needs some refinement. The major third from the C/C7-chord shows that there's a Mixolydian aroma to this riff as well, thus yet another example of mingling two closely related scales.

6. Excentrifugal forz

"Excentrifugal forz" begins instrumentally in A Mixolydian. The bass riff, that is introduced during this opening, continues being used and varied upon as the basis for the remainder of the song in a couple of appearances (the main riffs are indicated as A, B and B1 in the Apostrophe Guitar Book). Following upon the opening you've got Zappa speech-wise singing the lyrics in an irregular manner, interrupted by a little guitar solo. Various synthesizer effects are included as well.

The instrumental opening, included above, is all about the parallel playing of fifths over a bass pedal and riff. Bars 1-2 are just the A5 chord ticking over a voluptuous synthesizer A pedal. The rhythm during bars 4-6 is quite articulated. It goes fast and virtually every beat has a rhythm of its own.





Excentrifugal forz, 0:00-0:13. Transcription: KS/Andy Aledort.

The meter is standard 4/4, except for bar 2, that gets extended with an eighth note. In bars 3-6 you've got three parts playing the descant line:

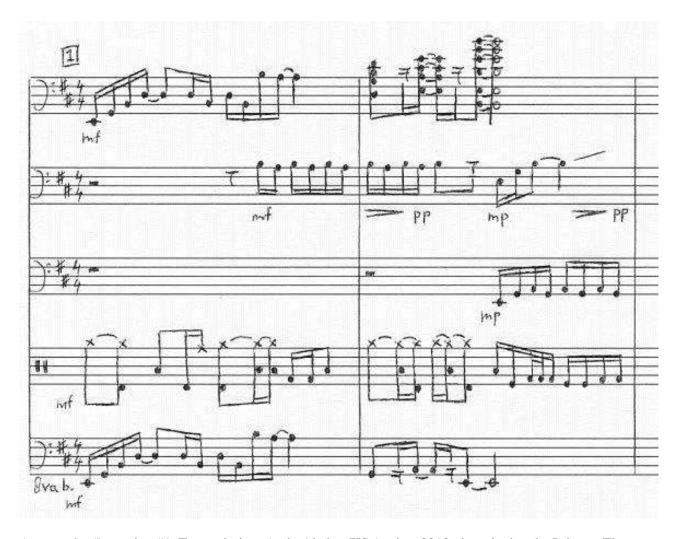
- A higher sax in the soprano range (staff 3 in bar 2, staff 2 for the remainder).
- A sax in the alt range (staff 4 in bar 2, staff 3 for the remainder).
- A synthesizer playing along with the last (alto) sax, though not fully identically (staff 5 in bar 2, staff 4 for the remainder).

These three descant lines are playing around a series of parallel fifths: F#5-D5-E5-F#5-E5. The bass lick supports this with mainly an A pedal, so the total harmony can become F#m and Esus4.

7. Apostrophe (')

The title track from "Apostrophe (')" is one of two instances on this album of Zappa collaborating with others regarding songwriting. Next to Zappa himself, it gets credited to Jack Bruce and Jim Gordon. Without inside information it's impossible to know who exactly contributed what. Since Jim Gordon plays the drums, I felt obliged to include the drum part in the note examples in this case. "Apostrophe (')" got recorded as a quartet with also Tony Duran on rhythm guitar. Jack Bruce plays the fuzz-like bass. The Apostrophe (') guitar book comes in handy for following the structures of the included songs, because they are subdivided into blocks with capitals. I'm following these blocks in the overview below.

A (0:00-0:17). Opening theme. The central theme of "Apostrophe (')" is a guitar-bass riff presented in bar 1 of the next note example. It is using notes from the Em7 chord, only at the end getting at an A outside this chord. It gets played without accompanying chords but with some synthesizer sounds added to it as shown in staves 2-3, probably overdubbed. The riff is played four times and it gets followed twice by a chord progression: G-A-Em. Because the riff begins on E and the chord progression ends on it, the key can be identified as E Dorian. Rhythmically the riff is half on-beat and half syncopic. The A and Em chord of the progression appear in syncopic positions as well.



Apostrophe ('), section #1. Transcription: Andy Aledort/KS (update 2013, deposited at the I-depot, The Hague).

Drumset notation (bottom up): bass drum, toms 1-2, snare drum, high-hat, cymbal.

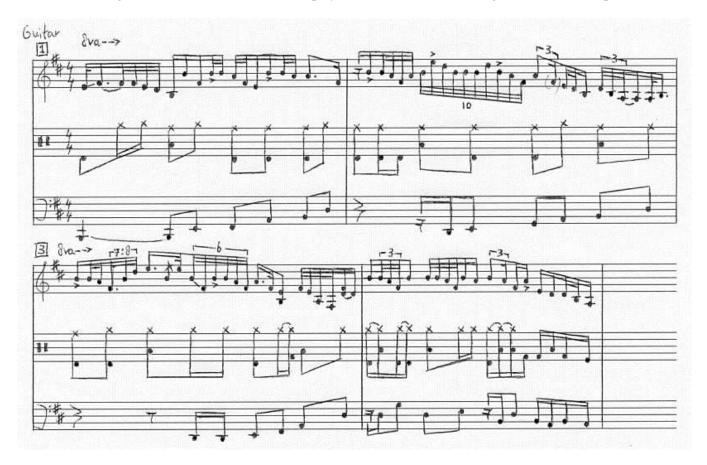
B (0:17-1:19). Alternation between D Mixolydian and C major, each played for two consecutive bars every time they appear. Here the bass is leading, playing the melody, while the guitar plays a number of chords on D or C. The two scales, that are being used, differ by one note, namely the F# from D Mixolydian and the F natural from C major. In the note example you can see the F# in the chords from bars 3-4. The F natural turns up in the bass line from bars 5-6. The following note example begins around the middle of this block with the alternation being at C major, though the bass line in bars 1-2 is chromatic.



Apostrophe ('), section #2. Transcription: KS/Andy Aledort (update 2013, deposited at the I-depot, The Hague). Drumset notation (bottom up): bass drum, snare drum, high-hat, cymbal.

C (1:19-1:24). Two transitional bars in B Dorian.

D (1:24-3:22). Bass and guitar duet in B minor or Dorian. These two scales differ by one note, G versus G#, and they both are being used. In the example below you have a G by the bass. In the guitar book you can see both G and G# turn up for the guitar part. Andy Aledort apparently marked this block as a guitar solo, rather than a duet. Indeed you could say this is the part with the guitar soloing being the most active contributor. The guitar solo itself starts with a riff played four times, not returning elsewhere in this piece.



Apostrophe ('), section #3. Transcription: KS/Andy Aledort (update 2013, deposited at the I-depot, The Hague).

Drumset notation (bottom up): bass drum, toms 1-2, snare drum, high-hat, cymbal.

E (3:22-3:44). Closing notes of the guitar solo and bass, a faint C# for the guitar and the tonic B for the bass. With it four bars of drum soloing start.

F (3:44-5:31). Variations upon the previous:

- The central theme returns four times.
- Mix of free variations upon the central theme by all parts and improvised melodic lines. The lead guitar is little by little moving towards the background till in the last five bars it's only the rhythm guitar and the bass left. In these last bars a closing riff gets repeated, not directly related to the central theme.

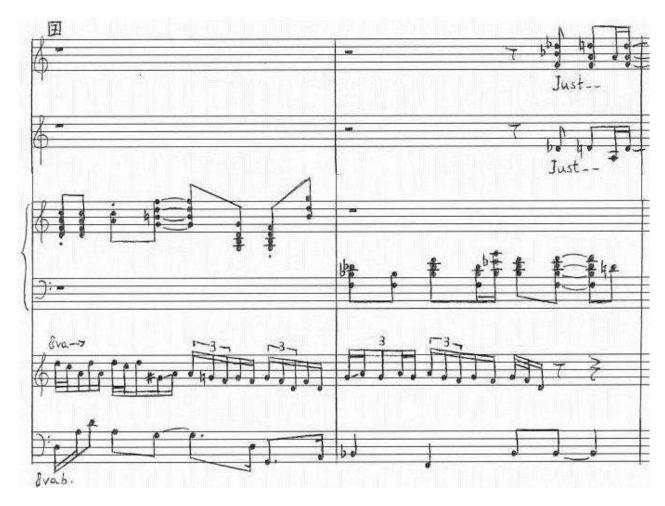
G (5:31-5:50). The central theme returns once more, while this instrumental fades out to its end.

8. Uncle Remus

"Uncle Remus" is a collaboration between Zappa and George Duke. When I included this example during the update of the summer of 2013, I had no information about who contributed what. In the "Crux of the biscuit" liner notes, George Duke gets quoted from an unreleased interview with Andy Hollinden from

1997, saying: "[...] So he was going to do a demo for me. We did three songs and "Uncle Remus" was one of them. Frank decided, after we recorded it - I didn't get a deal out of it, by the way - but, basically, he said, "I think I'd like to use this track on my album and I'm going to write some lyrics to it". And so I said, "Hey Frank, you paid for it. Go ahead". [...] I was very happy and honored by the fact that he'd even consider doing it, because I didn't think it'd be the kind of song he'd be interested in".





Uncle Remus, interlude. Transcription: Andy Aledort/KS (update 2013, deposited at the I-depot, The Hague).

Note: the keyboard part is reduced to the notes I can directly hear, but their positioning is probably wider.

So as a musical collaboration it's a lesser example than the above "Apostrophe (')" track or "No more Mr. nice guy" from the Joe's garage section from this study. These two songs contain no lyrics, so the cooperation can only have been musical. Still there's some musical contribution by Zappa in the sense that he plays solo guitar on it, as well as being the producer of the song. But the music is written by George Duke alone, and the lyrics by Zappa alone. The example below contains a part of the instrumental interlude with Zappa soloing on guitar along the chord progression of the central theme. George of course is playing the keyboard part. It's a progression drifting along a number of scales. Andy Aledort notates it as D minor, but that's only a relatively best fitting choice. The chord progression here is, mostly as indicated by Andy:

bar 1: Dm - Dm plus C by the bass.

bar 2: G - Gm - Am.

bar 3: Gm7 - Dm - C plus D by the bass.

bar 4: Gm7 - Bb - Eb - Bb.

bar 5: F - Bb - F - Fsus2 - Gm.

bar 6: Bbmaj7 plus C by the bass - C - Bbmaj7 plus G by the bass - C - Bbmaj7 - C - Bb.

bar 7: Dm7 - G7/G.

bar 8: Bbm - Eb - Bbm - D.

The scales passing by briefly are: D Dorian for bar 1, bar 2 is transitional, D minor for bar 3, G minor/Bb

major for bar 4, F major or Mixolydian for bar 5, C Mixolydian for bar 6, D Dorian/G Mixolydian for bar 7. Bar 8 follows a Bb minor variant, the series of notes being Bb-C-Db-Eb-F-G-A. With the last chord from bar 8 you're getting back at D Dorian. The rhythm of this song is standard playing in 4/4. The lyrics have Zappa accompanied by a female chorus all through (staff 1 in bars 1 and 8). The Ikettes without Tina now get mentioned by their first name (Debbie and Lynn; see also above). The album also mentions Susie Glover, so she might be in the chorus too. These lyrics refer to black people and the riots they could get involved in in the sixties and seventies. As in many of his songs Zappa sings it in the I-form, while it's obviously not about himself, with its purpose remaining cloudy. Maybe it was just for portraying some aspects of what was going on in these days.

The two collaboration pieces from above however never appeared live on official albums. "Apostrophe (')" was used as a concert opener during the Bongo Fury tour, an interesting version that fans know by for instance the El Paso bootleg. Since the ZFT steadily releases live albums, we might get to hear more from this tour one day too.

9. Stinkfoot (1974)

In the Halloween section of this study you can find the live version of "Stinkfoot (1978)" compared to the studio version from "Apostrophe (')". The main vamp goes pretty differently. This goes for all live editions of "Stinkfoot", the other ones appearing on "YCDTOSA Vol. II", "FZ:OZ" and "Make a jazz noise here". All have a guitar solo in C Mixolydian in them, making each version of interest. To the right an outtake from the Billboard top LPs as reproduced in the "Crux of the biscuit" CD booklet (with Zappa's position encircled), dated June 29, 1974. "Don't eat the yellow snow" was released as a single, which helped to get some air-play. Other photos in the booklet concern the Rolling Stone review and the golden album, granted in 1976.

"Stinkfoot" knows no chorus, only a verse in a couple of appearances, and solos. Globally "Stinkfoot" is constructed as:

- 0:00 Verse, shape 1, "In the dark, where all the fevers grow ..." (see the Halloween section for bars 1-4).
- 0:44 Verse, shape 2, "Out through the night ..."
- 0:59 Smaller guitar solo.
- 1:06 Verse, shape 3, "This has to be the disease for you ...". Zappa continues singing speech-wise.
- 1:27 Verse, shape 4, "Y' know, my python boot is too tight ...". Sung again as during shape 1, now with a guitar soloing along with it.
- 2:03 Side theme, "Here Fido ..."
- 2:17 Larger guitar solo.

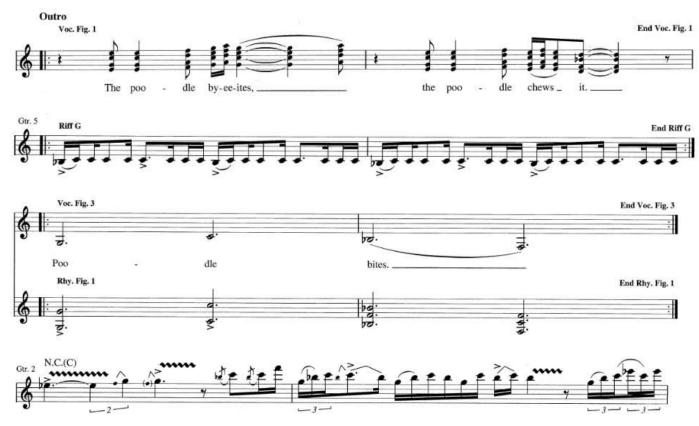
Much of the solo is played over a vamping figure as in bars 1-7 from the example below. It's a figure in C Mixolydian along the line C-C-Bb-G-F-G. Bar 8 interrupts this pattern with an alternative line. The harmonies are predominantly C7/C and Bb, being played around in an improvised manner by George. There are many chromatic elements happening in this solo with an Eb being used frequently next to an E natural. So it might be called another instance of mingling Mixolydian and Dorian, as is also happening during the opening (see the Halloween section for the details). The opening bars of the solo from below are more brightly in Mixolydian, with the D# (Eb) appearing as a passing note.



Stinkfoot, solo 2:17-2:44. Transcription: KS/Andy Aledort (update Summer 2019, deposited at the I-depot, The Hague).

At the onset of the seventies, Zappa started using the possibility of double-channeling a guitar, using a different exit for the right and left channel. Not only does the sound get different, also the volume accents vary. In case of the "Stinkfoot" solo the stereo effect is outspoken, which in this case I've tried to indicate in the transcription for its notes. During bars 1-2 there's probably a second guitar for the middle field, the remainder is the lead guitar. Visually the effect can be such that some of the notes are about only audible left or right, but it's mostly the difference in sound that creates this stereo effect, hard to capture on paper. Apart from that Zappa kept varying the sound of his guitar all through his career, as well as the other instruments. The result is that most of his albums have a sound that is specific for that album only. Combined with the wide range of styles, his total output could be called extreme as it comes to a desire for variation and exploring musical possibilities.

- 3:20 Instrumental interlude.
- 3:34 The solo continues.
- 3:52 Verse, shape 5, with the vamp from the solo continuing slightly different. At 4:49 the accompanying guitar starts soloing some more.
- 5:11 Outro. This outro is polyphonic, built up using the following layers:



"Stinkfoot" outro (the meter is 12/8). Source: Apostrophe (') Guitar book, transcription by Andy Aledort.

- a) Vocal figure 1: the chorus singing "the poodle bites, the poodle chews it". The chord progression in C Mixolydian is I-II alternating, ending with VII.
- b) Guitar 5/riff G: bass figure ticking Bb-C-C etc., establishing C as tonic.
- c) Vocal figure 3/rhythm figure 1: Zappa singing "poodle bites" along harmony chords, following V-I-VII-IV. All parts are in 12/8 without syncopes, but only half of the time coinciding, stressing the polyphonic character of the outro. The combined notes of a) and c) create wider harmonies.
- d) Guitar 2: solo guitar. As during much of "Stinkfoot", the guitar is playing an improvised solo-like part. Again you can see an Eb being involved next to the E natural from the vocal parts. Thus again a mingling

of Mixolydian and Dorian.

These figures appear in a couple of variants. d) continues soloing, while a)-c) gradually fade out towards the end.

- 6:37 End.

ROXY AND ELSEWHERE: METERS AND RHYTHMS

TABLE WITH METERS

Zappa's use of meters can either be stable, like the "Uncle Meat main title theme", that is 3/4 for the whole melody, or very versatile like in "Igor's Boogie, phase 1" from "Burnt weeny sandwich" (see "The Frank Zappa songbook vol. I", pages 36-37; the Burnt weeny sandwich section contains some bars). Given here are the subsequent bars with their meters:

bar 1-2: 4/4

bar 3: 3/8

bar 4-5: 7/8

bar 6: 5/4

bar 7: 4/4

bar 8-12: 3/4

bar 13: 4/4

His desire for odd meters and rhythms is outspoken. Examples are numerous and dealt with throughout this study and the intention of this section is not to give examples from all corners from Zappa's rhythmical universe, but only to start with briefly summarizing the subject. The remainder of this section looks at examples from "Roxy and elsewhere" and four other ZFT releases surrounding this CD.

The following table gives an overview of the meters used in all examples in this study. Also included are columns that mark if an example contains tempo changes or irregular rhythmic groupings.

1	USE OF METERS IN THE TRANSCRIBED							
2	BARS IN THIS STUDY	METERS					TEMPO	IRR. GROUPINGS
						Two meters		Type of irregular
		4/4 and	3/4 and	12/16, 6/8,		simulta-	Tempo	groupings (not
3	Title	others in 4	others in 3	12/8, 6/4	Others	neously	changes	improvised; no triplets)
4	Lost in a whirlpool	X						
5	Pound for a brown/Legend of the golden arches				7/8			
6	Sleeping in a jar	X						
7	Guitar waltz		X					
8	Mice			X				
9	The Blackouts				No meter			
	The world's greatest sinner, single	X						
11	The world's greatest sinner movie sample #1	X						
12	The world's greatest sinner movie sample #2	X			10/8		X	
	The world's greatest sinner movie sample #3	X			11/8			
	Holiday in Berlin		X					
15	Run home, slome theme #1		X					
16	Run home, slome theme #2		X					
17	Run home, slome cue #3				10/4			
	The little march	X					X	
19	Run home, slow movie sample #1	X						
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	X						
24	Any way the wind blows	X						
25	Why don't you do me right (Pal records)			X				
26	Why don't you do me right (Joe's Xmessage)			X				
27	Why don't you do me right (1967)			X				
	Walkin' out	X						
	Waltz (Pal records)		X					
30	Speed-freak boogie	X						
31	Metal man has lost his wings			X				

3	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4		Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
32	Tiger roach	X	X					
33		X	X				X	
34	Breaktime	X						
35	Memories of El Monte			X				
36	Love of my life			X				
37	Grunion run			X				
38	Jessie Lee	X						
39	I was a teenage maltshop	X						
40	I'm loosing status at the high school	X						
41	Status back baby			X				
42	Toad of the short forest			X				
43	Duodenum	X						
44	Bossa Nova	X						
45	Mondo Hollywood	X						
46	Motherly love	X						
47	Hungry freaks, daddy	X						
48	I ain't got no heart	X						
49	Who are the brain police		X					
50	I'm not satisfied	X						
51	Trouble every day	X						
52	You're probably wondering why I'm here	X						
53	Help I'm a rock		X		(notational choice)			
54	It can't happen here							
	The return of the son of the monster magnet	X						
	The downtown talent scout	X						
57	Plastic people	X	X				X	
58	The duke of prunes	X						
59	Amnesia vivace	X						

2		4/4 and	3/4 and	12/16, 6/8,		Two meters simulta-	Tempo	Type of irregular groupings (not
3	Title Soft-sell conclusion		others in 3	12/8, 6/4	Others	neously	changes	improvised; no triplets)
		X						
	Brown shoes don't make it (1967-81)	X	X					quintuplets
62	Invocation & ritual dance of the young pumpkin	X	X				X	
63	America drinks	x				4/8+3/8 and 5/8		
64	America drinks and goes home	X						
65	Who needs the Peace corps?	X						
66	Mother people	X	X		7/8			
67	Absolutely free		X					
68	What's the ugliest part of your body?		X	X	7/8		X	
69	Concentration moon	X	X					
70	Bow tie daddy	X						
71	Flower punk	X						
72	The chrome plated megaphone of destiny				(notational choice)			
	No matter what you do	X						
74	Oh no	X	X					
75	I don't know if I can go through this again				(transcr. not certain)			
76	Almost Chinese	X						
77	It's from Kansas	X						
78	King Kong (Lumpy gravy)	X				4/4+3/8		
79	Foamy soaky				7/8		X	
80	Unit 3a	X					X	
81	Unit 9/ A vicious circle				(notational choice)			
82	Kangaroos				5/4			
83	How did that get in here?	X		X			X	
84	Cheap thrills	X						
85	How could I be such a fool (1966-68)	X	X					
86	Jelly roll gum drop	X						

3	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
87	You didn't try to call me	X						
88	"No, no, no"	X						
89	Stuff up the cracks			X				
90	Oh, in the sky			X				
91	If I only could be your love again			X				
92	Uncle meat		X					
93	Zolar Czakl				(notational choice)			
94	The legend of the golden arches	X	X		2/4, 5/4, 7/4, 7/16			
95	Project X	X						
96	King Kong		X	X				
97	Dog breath	X					X	
	Dog breath variations (1969)	X	X		5/4			
99	Dog breath variations (1974)	X	X		5/8, 9/8			
100	Dog breath variations (1993)				9/8, 11/8			
101	Exercise #4 (1973)	X			2/4, 7/8, 11/8			
102	Prelude to King Kong				5/16			
103	lan Underwood whips it out				10/16			
104	The air			X				
105	Cruising for burgers	X	X	X	2/4, 24/32			
	Epilogue	X	X		5/4, 5/8, 7/8, 9/8		X	
107	Agency man	X	X					
	The rejected Mexican pope	X	X	X	5/8, 7/8			
109	Uncle rhebus			X	7/8, 8/8, 15/32		X	
110	It must be a camel		X					
111	Peaches en regalia	X						quintuplet
112	Willie the pimp (1970)	X						
113	The Gumbo variations	X						
114	Little umbrellas	X						quintuplet

3 Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
115 Twenty small cigars		X	,				,
116 Igor's boogie 1	X	X		5/8			
117 Igor's boogie 2				(notational choice)			
118 Theme from Burnt weeny sandwich	X						
119 Aybe sea	X						
120 Little house piano intro		X		5/8			
121 Eric Dolphy's memorial barbecue		X					
122 Kung fu		X		5/8, 5/4			6-tuplets
123 My guitar wants to kill your mama	X						
124 Little house main theme	X		X	11/8	11/8+12/8		
125 What will this evening bring me this morning	X						
126 Dwarf Nebula	X						
127 Sofa interlude		X					
128 Didja get any onya				7/16, 14/16			
129 Gas mask				5/16			
130 Get a little	X						
131 The Orange County lumber truck	X		X	2/4			
132 Weasels ripped my flesh				No meter			
133 Baked-bean boogie	X						
134 No waiting for the peanuts to dissolve	X						
135 Chocolate Halvah	X						
136 Underground freak out music			X				
137 The Nancy and Mary music	X						
138 Tell me you love me	X						
139 Sharleena	X						
140 Chunga's revenge	X						
141 Rudy wants to buy yez a drink	X		X				
142 Transylvania boogie (Ahead)	X	X			3/4+4/4 & 8/4		

3	Title	4/4 and	3/4 and others in 3	12/16, 6/8,	Others	Two meters simulta- neously	Tempo	Type of irregular groupings (not improvised; no triplets)
_	Transylvania boogie (Chunga's)	X	others in 3	12/0, 0/4	Others	lieously	changes	improviseu, no impiets)
144	Twinkle tits	X		X				
	Chunga's basement	X						
	Dance of the just plain folks	X	X					
	Holiday in Berlin solo	X	X					
	Call any vegetable solo	X	^					
	Brain police (1970)	X						
	Brain police (1971)	X						
	The subcutaneous peril	X						
	You never know who your friends are	X						
	Little house intro (1971)	X		X				
	Latex solar beef	X		٨				
		×						
	(Willy the pimp (1971)) Bwana dick				0.00		**	
		X			2/2		X	
	Do you like my new car?	X						quintuplet
	The groupie routine	X						
	Tears began to fall	X						
	Scumbag	X						
	Brixton still life	X						
162	Once upon a time			X				
163	Sofa (1971)		X					
	Divan	X						
	Call any vegetable (1971)	X						
	She painted up her face	X						
	Penis dimension		X					
	Billy the mountain	X	X		13/8			
169	Number 7				5/8, 7/8			
170	Piccolo score			X				

3	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
171	Nun suit	X		,				quintuplet, 6-tuplet
172	The girl's dream	X						quintuplet
	Little green scratchy sweaters		X					
174	Mystery roach	X					X	
175	Tuna sandwich bolero	X						
176	Lonesome cowboy Burt	X						
	Centerville		X					
178	Touring can drive you crazy		X					
	Janet's big dance number		X					
180	Half a dozen provocative squats			X	9/8			
181	Lucy's seduction of a bored violinist			X	7/8, 24/8	X		
182	I'm stealing the room	X		X	2/4, 11/16, 14/16			
183	Dental hygiene dilemma	X			No meter			quintuplets
184	Dew on the newts we got			X	9/8, 10/8, 11/8			
185	Magic fingers	X						
	Magdalena	X		X			X	
187	Overture	X						
188	Would you like a snack?	X						5- and 10-tuplet
189	What's the name of your group	X		X	5/8, 7/8, 9/8, 5/4			
	Can I help you with this dummy	X			5/8			9-tuplet
191	The pleated gazelle	X						
192	Big Swifty	X	X		7/8			
	It just might be a one shot deal	X			6/16, 5/4			
	For Calvin			X				
	Your mouth			X				
	Eat that question	X						
	The grand wazoo	X						
198	Another whole melodic section	X			15/16			

3	Title	4/4 and	3/4 and others in 3	12/16, 6/8,	Others	Two meters simulta- neously		Type of irregular groupings (not improvised; no triplets)
	Think it over	X	Others in 5	12/0, 0/4	Others	licousty	changes	improviscu, no tripicts/
	Waka/Jawaka	X						
	Cletus awreetus-awrightus	X						
	Blessed relief		X					
	Greggery Peccary mvt. I interlude	x						
	Greggery Peccary mvt. III solo	X						
	Variant I processional march	X						
	Imaginary diseases	X						
207	Rollo	X	X		2/4			
	Been to Kansas City	X						
	D.C. Boogie	X						
	Farther O'blivion	X						
211	Little dots	X						10-tuplet
	Camarillo brillo	X						
213	I'm the slime	X		X				
214	Dirty love	X						
215	Fifty-fifty	X						
	Dinah-Moe Humm	X						
217	Montana	X						quintuplets, 6-tuplets
218	Don't eat that yellow snow				7/8			
219	Don't eat that yellow snow (Australia)	X			7/8, 30/16			
	Nanook rubs it			X				
221	St. Alfonso/Father O'blivion	X			2/4, 6/8, 7/16			
222	Excentrifugal forz	X			9/8			
223	Apostrophe	X						
	Uncle Remus	X						
225	Echidna's arf	x	x	x	2/2, 3/2, 2/4, 11/16, 21/16	4/4+11/16		

3	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously		Type of irregular groupings (not improvised; no triplets)
					5/16, 7/16, 9/16,			
226	Don't you ever wash that thing	X			11/16, 5/8, 7/8			
227	Cheepnis	X	X	X	5/8, 7/8			
228	Orange County	X						
229	Dickie's such an asshole			X				quadruplets
230	Pojama prelude			X				
231	All skate	X		X				
232	Village of the sun (1973-74)	X	X	X	5/4, 11/4, 9/8			
	Inca roads (1973)	X		X				
234	Sheik Yerbouti tango	X						
235	Be-bop tango	X						6-tuplets, 7-tuplets
	Approximate	X						
237	Pygmy twylyte	X	X					
	The idiot bastard son	X	X		2/4			
239	Room service	X			5/4			7-tuplets
240	Dummy up	X						
	Dupree's paradise (1974)	X	X	X	2/8, 5/8, 10/16			
	Florentine Pogen	X						
243	Inca roads (1975)	x			5/4, 5/16, 6/16, 7/16, 9/16, 11/16			
244	Po-jama people	X						
	Can't afford no shoes	X						
246	Evelyn				(notational choice)			
247	San Ber'dino	X						quintuplets
248	Andy	X			5/16, 6/16			
249	Debra Kadabra	x		X	7/16, 9/16, 12/16, 11/8, 5/8, 14/8		x	
250	Carolina hard-core ecstasy	X						
	200 years old			X				

3	Title	4/4 and	3/4 and others in 3	12/16, 6/8,	Others	Two meters simulta- neously	Tempo	Type of irregular groupings (not improvised; no triplets)
_	Cucamonga	X	X	12/0, 0/4	2/4	Heousiy	X	improvised, no triplets)
	Muffin man	X			2.		X	
	Original duke of prunes	X						
	The duke of prunes regains his chops	X						
	Duke of prunes (1975)	X						
	This town is a sealed tuna sandwich (prologue).	X					X	
258	Bogus pomp, tuna sandwich theme	X						
	Bogus pomp, piano variation	X						
	Bogus pomp, part of the coda	X						
261	Music for a low budget orchestra		X		7/8			9-tuplet
262	Greggery Peccary	X	X		5/8, 7/8, 5/16, 7/16		X	quintuplet
	The new brown clouds (1972-5)		X	X		6/8+10/8		
	Lemme take you to the beach	X			7/8, 9/8			
	RDNZL	X	X	X			X	
	Phyniox	X						
	Reeny ra			X				
	Any downers?	X						
	Kaiser rolls	X						
	Keep it greasy (1976)	X						
	Keep it greasy (1979)				19/16			
	Black napkins		X					
	Chunga's revenge, rhythm guitar solo	X						
	City of tiny lights	X						
	Wind up working in a gas station	X			15/16, 17/16, 10/16, 6	/16		
	The torture never stops	X						
	Friendly little finger				(transcr. not certain)			
	Zoot allures	X						
279	Disco boy	X						

	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
280	Filthy habits	X	X		5/4		X	5-, 6- and 7-tuplet
	Regyptian strut	X						
282	Flambay	X	X					
	Time is money	x	X	X	13/16, 2/4, 5/8, 11/16, 7/16, 9/16, 10/8			
	Sleep dirt			X				
285	The ocean is the ultimate solution	X						
286	The black page #1	x						various incl. tuplets within tuplets
	Manx needs women	x					x	various incl. tuplets within tuplets
288	Titties and beer	X						
289	I promise not to come in your mouth			X				
290	Big leg Emma			X				
291	The purple lagoon/Approximate	X						6-tuplets
292	The be-bop tango (1976, The purple lagoon)				7/8			5- and 7-tuplet
	Duck duck goose	X						
294	Down in the dew	X			14/32			
295	A little green rosetta	X						
296	Ship ahoy				No meter			
297	Jones crusher	X	X	X				
	Punky's whips	x			14/32, 17/32, 18/32, 33/32		x	
299	Conehead vamp	X						
	Conehead (1978)	X						
	Basement music #2	X						
302	Bowling on Charen	X						
	The black page #2	X						

3	Title	4/4 and	3/4 and others in 3	12/16, 6/8, 12/8, 6/4		Two meters simulta- neously	Tempo	Type of irregular groupings (not improvised; no triplets)
	I have been in you	X	outer out o	12.0, 0.1	5.11010		onangoo	mprovided, no implotor
305	Flakes	X						
306	I'm so cute	X						
307	Baby snakes				2/4, 24/16			
308	Dancing fool	X						
	Wild love	X						7-tuplet
310	Mo' mama	X						
311	Yo' mama	X						
312	Dong work for Yuda	X			23/16			
313	Watermelon in Easter hay (H.O.)	X			5/8			
	King Kong (H.O.)		X	X				
	Paroxysmal splendor	X			24/16			
316	Heidelberg	X						
	Ancient armaments		X					
318	Stinkfoot (1974-8)			X				2-tuplet
319	Occam's razor	X						
320	On the bus	X						
	Central scrutinizer	X						
322	Joe's garage	X						
323	Catholic girls	X			14/16, 18/16, 22/16			
324	Fembot in a wet T-shirt.	X						
325	Why does it hurt when I pee?	X						
	Lucille	X		X		4/4 + 12/8		
	Sy Borg				X			
	Outside now			X	5/8			
	Packard goose	X					X	
330	Watermelon in Easter hay	X			5/4			
331	Tush-tush	X						

2		4/4 and	3/4 and	12/16, 6/8,		Two meters simulta-	Tempo	Type of irregular groupings (not
	Title		others in 3	12/8, 6/4	Others	neously	changes	improvised; no triplets)
	A token of my extreme	X						
	No more Mr. nice girl	X						
334	Fine girl	X						
	Panty rap	X						
	Easy meat	X						
	Dance contest	X						
338	The blue light	X			7/4	4/4 + 7/4		
	Pick me, I'm clean	X						
340	Peaches III	X	X				X	quintuplet
	Five-five-FIVE				5/8, 5/4			
342	Shut up 'n play yer guitar	X						
	While you were out	X						
	Treacherous Cretins	X						
345	Soup 'n old clothes			X				
	Gee, I like your pants	X			5/4			
	Canarsie				13/18, 14/18			
	The deathless horsie (YCDTOSA)	X		X				
	The deathless horsie (SUNPYG)				5/4			
350	Pink napkins			X				
351	Return of the son of Shut up 'n play yer guitar	X						
	Why Johnny can't read				No meter			
	Canard du jour	X						
	Harder than your husband	X	X	X				
	Doreen	X						
	Tengo na minchia tanta	X						
	Society pages	X						
358	You are what you is	X						
	Beauty knows no pain	X			18/16			
359	beauty knows no pain	X			16/16			

3	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
360	Stevie's spanking	X		,				, , , , , , , , , , , , , , , , , , , ,
	Heavenly bank account		X		5/4			
362	Jumbo go away	X						
363	The meek shall inherit nothing	X						
364	If only she woulda	X						
	Mo 'n herb's vacation	x			5/8			various incl. tuplets within tuplets
366	Bogus pomp	X					X	
367	Sad jane	X	X		7/16, 5/4, 7/8			quintuplet
	Bob in Dacron		x		7/16, 7/8, 5/8, 7/8, 11/8, 5/4, 11/32			
369	Pedro's dowry	X		X		4/4+12/8		5- and 7-tuplet
370	Envelopes (1983)		X					
371	Outside now, again		X	X				
	The girl in the magnesium dress		X					
	Dupree's paradise (1985)	X		X	7/8, 9/8, 2/4			
374	The perfect stranger	X	X		9/8		X	4-, 5-, 7- and 9-tuplet
375	Drowning witch	X	X	X	2/2, 9/4, 9/8, 6*3/16	9/8+6*3/16		6:7-tuplet
376	Valley girl	X						
377	(Envelopes (1982))							
378	I come from nowhere	X			2/4, 5/4, 27/16			
379	Teen-age prostitue	X	X	X				
380	Ya Hozna		X					
381	Sinister footwear II		X					7-tuplet
	Marque-Son's chicken	x			9/16, 10/16,13/16, 14/16, 15/16			
383	Them or us			X				
384	Frogs with dirty little lips	X						

3	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4		Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
	Theme from Sinister footwear III		X					
	Sinister footwear I	X	X		5/4, 7/8			5-, 6-, 7-, 8-tuplets
	Naval aviation in art?/Jeff and Don		X					
	Cocaine decisions	X						
389	Stick together	X						
390	The jazz discharge party hats		X		2/4			quintuplet
	The radio is broken	X			16/32			
	Tink walks amok	X			11/16			
393	Moggio		X	X	5/8, 10/8, 11/8			
394	We're not alone	X			5/4			
395	The torture never stops (1980)	X						
396	Prologue		X					
397	The mammy nuns	X						
398	Wistful wit a fistful	X	X	X			X	
399	The 'torchum' never stops		X					
400	Harry and Rhonda	X						
401	Harry-as-a-boy	X						
	Artificial Rhonda	X						
403	The crab-grass baby	X						
	Brown Moses	X		X				
405	No not now/Won ton on	X						7-tuplet
406	Baby take your teeth out	X						
	Let's move to Cleveland		X					
408	Hot plate heaven at the Green hotel	X						
	For Giuseppe Franco			X	18/16			
	He's so gay	X						
	Bobby Brown	X						
412	One man - one vote				34/16			

3 Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
413 Aerobics in bondage				(notational choice)			
414 I don't even care	X						
415 What's new in Baltimore	X	X		5/8, 7/8			
416 Alien orifice	X						7-tuplet, 14-tuplet
417 Porn wars	X		X				
418 H.R. 2911				(notational choice)			
419 Night school	X						
420 The Beltway bandits				10/16, 11/16			
421 While you were art II				(notational choice)			
422 G-spot tornedo				2/2			
423 Damp ankles				(notational choice)			
424 Massagio Galore	X						
425 The black page (1987)	X						
426 Sexual harassment in the workplace			X				
427 Republicans	X						
428 Do not pass go			X				
429 In-a-gadda-Stravinsky	X						
430 That's not really a shuffle	X						
431 Once again, without the net	X						
432 That's not really reggae	X						
433 Jim and Tammy's upper room	X						
434 Were we ever really save in San Antonio?	X						
435 Hotel Atlanta incidentals	X						
436 Sunrise redeemer	X						
437 Orrin hatch on skis	X						
438 For Duane			X				
439 GOA	X						
440 Swans? What swans?	X						

3	Title	4/4 and	3/4 and	12/16, 6/8,		Two meters simulta-	Tempo	Type of irregular groupings (not
_		X	others in 3	12/8, 6/4	Otners	neously	cnanges	improvised; no triplets)
	Things that look like meat							
	System of edges	X						
	Too ugly for show business	X						
	Canadian customs	X						
	Babette			X			X	
	Ride my face to Chicago	X						
	The black page (1984)	X						
	Shall we take ourselves seriously	X						
	Thirteen				13/16			
	Honey, don't you want a man like me? (1976)				2/4			
	(Honey, don't you want a man like me? (1980))							
	(Honey, don't you want a man like me? (1984-88))							
453	King Kong (1971/82)	X		X	2/4, 9/16, 24/16	9/16+12/16		
	Rhymin' man	X						
455	Promiscuous	X						
456	Welcome to the U.S.	X		X	No meter			
457	Any kind of pain	X			7/8			
458	What kind of girl?			X				
459	Jesus thinks you're a jerk	X						
	Heavy duty Judy (1988)			X				
461	The black page (new age version)	X						
462	When yuppies go to hell	X	X	X	11/4		X	
	The torture never stops, part II	X						
	Zomby woof	X	X		2/4, 5/4, 10/15, 15/16			quintuplet
465	King Kong (1988)	X						
	Let's make the water turn black	X						
467	Good Lobna			X				
468	Butter or cannons	X						

3	Title	4/4 and others in 4	3/4 and others in 3	12/16, 6/8, 12/8, 6/4	Others	Two meters simulta- neously	Tempo changes	Type of irregular groupings (not improvised; no triplets)
469	Ask dr. Stupid	X						
470	Trance-fusion			X	9/8			
471	Diplodocus	X						
472	Soul polka				5/8			
473	Light is all that matters	X						
474	Bavarian sunset	X						
475	Outrage at Valdez				9/4			
476	The Valdez score				(notational choice)			
477	Electronic music by FZ				(transcr. not certain)			
478	Improvisation in A	X						
479	Budapest solo		X					
480	Strat Vindaloo				3+3+2			
481	Strictly genteel		X					
482	9/8 Objects	X			9/8	9/8+4/4		
483	What will Rumi do?	X			9/8	9/8+4/4		
484	T'Mershi Duween (1991)	X		X	10/16		X	23-tuplet
485	This is a test	X						
486	(Uncle meat (1992))							
487	Exercise #4 (1992)			X				
488	Ruth is sleeping		X		2/4, 9/8			
	III Revised	X						
490	Times beach II				(transcr. not certain)			
491	Times beach III				(transcr. not certain)			
492	Times beach IV				2/4			5-, 7-tuplet
493	Pentagon afternoon				2/4, 2/5			
494	Food gathering in post-industrial America	X			11/8			17-tuplet
	None of the above	X						
496	Get Whitey				9/4			23-tuplet

3	Title	4/4 and	3/4 and others in 3	12/16, 6/8,	Others	Two meters simulta- neously	Tempo	Type of irregular groupings (not improvised; no triplets)
	Put a motor in yourself	X	X	X	9/16, 10/16	neously	changes	improviseu, no impiets)
431	Put a motor in yoursen	^	Α		17/32, 5/16, 6/16,			
498	Reagan at Bitburg	X		Х	7/16, 8/16, 10/16			
	Xmas values				(notational choice)			
500	Buffalo voice				(notational choice)			
501	N-lite				(transcr. not certain)			
502	I was in a drum				(transcr. not certain)			
503	A pig with wings				(transcr. not certain)			
504	Hot & putrid				(transcr. not certain)			
	The unanswered cluster 1a				No meter			
	Gross man				(transcr. not certain)			
	Why not				(transcr. not certain)			
	Beat the reaper				5/4			
509	Samba funk	X						quintuplet
	Overture to Uncle Sam	X	X	X	11/16			
	Amnerika		X		15/16			
	Dance me this			X	9/16, 10/16, 11/16			
	Pachuco gavotte			X				
	Wolf Harbor				(transcr. not certain)			
	Rykoniki				(notational choice)			
	Piano				(notational choice)		X	
517	Calculus	X					X	

The general picture then is:

- 4/4 and others in 4: 348 examples

- 3/4 and others in 3: 96

- in 6 or 12: 93 - odd meters: 118

The odd meters vary between relatively normal ones as 5/4 and really unusual ones as 33/32 in "Punky's whips". The general idea may be clear: though 4/4 is also the most common meter in Zappa's music, his use of meters is highly diverse. It should be noted that meters and rhythms allow notational variants, so presentations as the table above offer no absolute figures.

Below at "Echidna's arf (of you)" I'm giving an overview of polyrhythms in the shape of two meters being used simultaneously.

RHYTHM (BRIEF SUMMARY)

While the number of sorts of meters for practical purposes is limited, rhythm can take thus many forms - and with Zappa actually applying them uninhibitedly - that it is virtually undoable to categorize them. A very general subdivision could be a partition into three as below, with Zappa doing all two or three in most of his works. Still you need to look at all the individual examples and their comment to get a better idea of the variety in Zappa's rhythms.

1) On beat figures. On beat is the standard for most music. It's hardly interesting to say that Zappa also does this, I'm just mentioning it for statistical completeness. Some examples in this study where on beat happens most of the time: "I ain't got no heart", "Absolutely free", "Agency man", "Willy the pimp", "Billy the mountain", "Eat that question", "City of tiny lights" 1976 version, theme from "Outside now", "Promiscuous", "Strictly genteel", "This is a test" and the 1st "Jesus thinks you're a jerk" example. Steady bass beats you can find in "Dancin' fool", 2nd "Flakes" example, and "Heidelberg".

2) Syncopic figures and pauses on beats. A series of examples with various of such bars: "Holiday in Berlin", "Run home slow" main theme, "Mother people", "Bow tie daddy", "Jelly roll gum drop", "Project X", "It must be a camel", "Eric Dolphy memorial party", "What will this evening bring me this morning", "Tell me you love me", "Sharleena", "Latex solar beef", "Overture" from 200 Motels, "Kaiser rolls", "Keep it greasy", the 1979 bass lick from "City of tiny lights", "The ocean is the ultimate solution", 2nd "Regyptian strut" example, "Duck duck goose", "Pick me, I'm clean", "You are what you is", "I come from nowhere", "The mammy nuns", "No not now", "Night school", "Ride my face to Chicago", "Ruth is sleeping" and "Put a motor in yourself".

Three really odd ones are: 1st "America drinks" example, "Another whole melodic section" and "Down in the dew".

3) Irregular rhythmic groupings. In case an odd rhythm is achieved via irregular groupings, the last column in the table above specifies the type of this grouping (non-improvised and no triplets). The "Bebop tango" from below is one of the first of a series of Zappa compositions where you don't see irregular groupings passing by once in a while, but systematically. Later on pieces as "The black page", "Manx needs women" and "Get whitey" would turn up. More on this topic in the Zappa in New York section.

ROAD TAPES, VENUE #2 (HELSINKI, 1973)

"Road tapes, venue #2" by the ZFT presents the Roxy band at Helsinki in 1973, a few months before the Roxy concerts. At this point Ian Underwood and Jean-Luc Ponty were still in the band, and Napoleon Murphy Brock would be enrolled shortly after. The three Helsinki gigs and the Stockholm concert, from which one of the "Be-bop tango" examples from below is taken, are subsequent venues. So it's remarkable

to see how many differences there are in the way the improvised sections during "Farther O'blivion" are dealt with. Apparently both Zappa and the band liked to keep things interesting by making new agreements about the outlines of such sections. The written parts remain the same on such short notice. In the long run these written parts can also change, like the opening of "Village in the sun". This song starts pretty different on "Road tapes, venue #2", "Roxy and elsewhere" and "YCDTOSA Vol. II" (see the examples below at the "Roxy and elsewhere" tracklist).

Pojama prelude

Next is a section from "Pojama prelude". It's one of three examples that show that Zappa could write lyrics independently of the music. Apparently the idea of a song about pojama people existed before the music from "One size fits all". The same goes for "Father O'blivion" (as part of the "Australian yellow snow" track on "One shot deal") and for "The torture never stops, original version" ("YCDTOSA Vol. IV").



Pojama prelude, section. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

The accompaniment for "Pojama people" is a vamp, something Zappa frequently chose to do when the lyrics stand central. He sings it speech-wise as in bars 1-2 of the example. In this case the accompaniment is a modulation scheme with George Duke improvising. It's two bars long in a 12/8 meter. In bar 1 you have a basic chord progression, bar 2 is free.

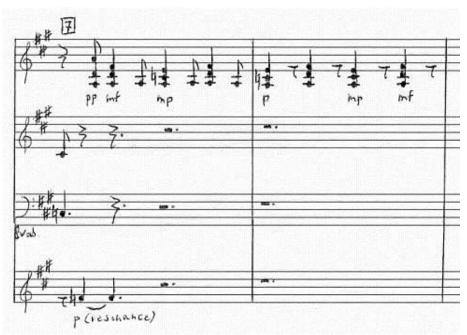
- Bar 1, beats 1-2: C Mixolydian with C-Em-Bb.
- Bar 1, beats 3-4: A Mixolydian A minor. The chord here is C#M7-augm. 5th. In harmony text books this chord gets located on step 1 of the major scale or step 3 of the minor scale, with the augmented 5th seen as an altered note: C#-E#-G double sharp-B#, notated as C#-F-A-C in the example. It's precisely the augmented note however that's used as a bass pedal, the A in this case, with the effect that the scale becomes something of starting in A Mixolydian and ending as if in A minor.
- Bar 2, beats 1-2: D Dorian or Mixolydian.
- Bar 2, beats 3-4: G Mixolydian.

All skate



All skate, section #1. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).





All skate, section #2. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

"All skate" is the closing piece from show 1 of the three Helsinki concerts from 1973. Zappa introduces it as making something up, with Ian starting it off. About all in this song is improvised, but the outlines must have been rehearsed of course. These are:

- 0:00-4:39: After the introduction Ian Underwood starts a synthesizer solo, with the band joining in after a while.
- 4:39-5:28: Rock 'n roll block. Zappa begins this block with a simple lick in 4/4, alternating I and VI in C Mixolydian. Next is an excerpt from half-way this block.

After a period of improvisation by the band without a meter, Zappa uses the first bar from the example as a pick-up bar to modulate to A Mixolydian. He does this by moving chromatically downwards via three parallel triads. In bar 4 George Duke repeats the I chord in a high register, rhythmically with much rubato. Next Zappa modulates once more via the method of bar 1, now to F# Mixolydian. In this case George specifically does not follow this scale, thus creating a number of dissonances. It sounds funny this way. - 5:28-11:31: Blues.

a) 5:28-6:39. After Zappa has started this section with a traditional blues lick, the band plays through the scheme once. This section is yet another example of Zappa and the band mingling closely related scales: A-B-C#-D-E-F#-G#: A major. The central scale, used for the blues chord progression. Bars 2-5 from the next example contain the tail of the scheme with I-V-IV-I.

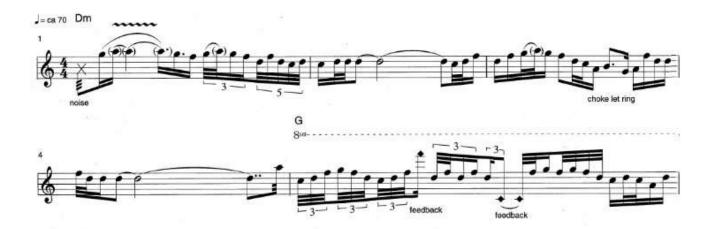
A-B-C#-D-E-F#-G: A Mixolydian. Followed for the soloing as for instance in bar 2 from the example. A-B-C-D-E-F#-G: A Dorian. Followed by George in for instance bars 1 and 5, staff 2, and bars 7-8, staff 1. The ensuing solo by George begins with A Dorian.

- b) 6:39-8:04: Solo by George Duke over the blues scheme.
- c) 8:04-10:45: Solo by Zappa over the scheme.
- d) 10:45-11:31: Outro. The blues pattern gets twisted by using dissonants. At 11:31 the "Dun-dun-dun" motif first appears.
- 11:31-14:10: Zappa sings the "Dun-dun-dun" motif in a couple of manners with the band repeating him. Next he asks the audience to participate by doing the same. The motif also gets used for the closing chords.

ROXY AND ELSEWHERE

1. Penguin in bondage

The opening of the guitar solo from "Penguin in bondage" has been transcribed by Mike Keneally for Guitar Player magazine, October 1995. Pages 88 and 89 show bars 1-12 from this solo. It's blues in D Dorian with these bars representing one cycle from the blues scheme: Dm-G-Dm-A-G-Dm or I-IV-I-V-IV-I from D Dorian. The A (or step V) chord has the C altered to C#, something happening more often in blues.



Penguin in bondage, opening bars from the guitar solo. Transcription: Mike Keneally.

Mike describes it as "Structurally it's just a three times through a 12-bar blues progression, and melodically it's nowhere near as otherworldly as his solo voyages throughout the later 70s and 80s. But in retrospect, "Penguin" feels like one of his best. It's a cockily self-confident blow that combines some of his most singable, funky lines (bars 3-4 and 9-11) with some archetypically mind-blowing flurries (bars 5-8), all delivered with a stinging, shimmering underwater tone." etc.

2-3. Pygmy twylyte - Dummy up

Zappa would keep playing "Pygmy twylyte" in an extended version in 1974. I'm dealing with this version in the next YCDTOSA Vol. II section, where I've included the main theme and excerpts from two different guitar solos. "Dummy up" is an example of a story-telling routine. This subject is also coming by in the next section, with the opening of this song next to examples from "Room service". "Dummy up" contains one of the funniest absurdities in Zappa's catalogue:

- FZ: "You get nothing with your college degree."
- Napoleon: "But that's what I want."
- FZ: "The truth is in saying, nothing is what I want."

During the Roxy performances Jeff Simmons and Don Preston had guest appearances. The 2018 "The Roxy performances" box by the ZFT, including all Roxy concerts, shows that "Dummy up" is a heavily edited version from the try-out night. Jeff Simmons and Napoleon Murphy Brock get co-credited as songwriters. It also shows that "Dummy up" could vary heavily each night and that it acted as some sort of interlude during "Pygmy twylyte". After "Dummy up" you could hear a reprise of "Pygmy twylyte", being skipped on the album.

Both "Pygmy twylyte" and "Dummy up" are about drug abuse. The first one in a rather cryptical way. At the end of track 1 of disc 1 of the 2019 ZFT issue "Halloween 73", you can hear Zappa commenting upon

this song: "our program will begin with a brand new song that deals with the delicate subject of drug abuse and how it can damage your consciousness to the point where you, just like the character in this song, may be led to seek gratification in uh, a Greyhound bus depot near a locker and/or located somewhere by the 33rd seat which is right in the proximity of the doo-doo room on the bus, the name of that song is Pygmy twylyte [...]".

4. Village of the sun

Today "Village of the sun" is available in three versions. They mainly differ by their introduction. The 1973 Helsinki version has a little instrumental composition as a prelude, that's not specifically related to the main song with lyrics. The whole goes as follows:

0:00 Zappa introduces the song.

"We have sort of a rock 'n roll song for you now, but don't worry, [...]. It features Mr. George Duke again singing in a high voice". On "Roxy and elsewhere" Zappa would more specifically explain what the lyrics of "Village of the sun" are about, namely the city of Palmdale. Zappa remembered it among others for the turkey farms. During the sixties and seventies Palmdale was a village of about 10.000 inhabitants, lying in the desert area of California. Today it has become a city of 150.000 people. To the left route 138 near Palmdale (photographer unknown).

1:07 Instrumental prelude.

1:07 Theme from the prelude. It's one of many Zappa compositions that I refer to as multi-scale. Nominally it's in E Mixolydian, but in about every bar different scales get touched upon. The meters keep varying. The theme ends on a sustained B note, lasting for a 3/4 bar.

1:28 The theme gets repeated. The example starts at 1:34, so it doesn't represent the whole theme. It does however contain all phrases from the theme, since some bars get repeated:

- bar 1: this bar is a string in 9/8. Its first three eight ticks follow the E Phrygian scale, the next set of six ticks follow the E Lydian scale.
- bar 2: this is the opening bar of the theme. It's in 4/4, subdivided as 3+2+3. Combined with bar 7, that serves as the coda, it sets the key to E Mixolydian.
- bar 3: melodic variation upon bar 2; the rhythm remains the same. Upon A pedal the Lydian scale gets followed.
- bar 4-6: bar in 6/8, played three times. The four staves show that's it's an alternation of a couple of elements. Staff 1 with E and B, staff two with two chords (combined with the bass being C#m7-5 and E7), staff 3 with D and A and staff 4 with G and D. The sounding whole forms two larger chords, not belonging to a single scale.
- bar 7: 4/4 again with a standard coda: VII-I in E Mixolydian.
- bar 8: unisono melody in 5/4, evading to step V of E Mixolydian.
- bar 9: this time the B note gets sustained for 11 beats instead of 3. This is done to insert a larger pause, because the main "Village of the sun" song has no connection with the prelude. Otherwise the transition with be too much abrupt.

1:53 Main song with lyrics.

1:53 Theme (block) 1.

- bars 10-13: phrase 1 in F Lydian. George Duke sings it in a rubato manner, along with playing the keyboard harmonies in the background. These harmonies are mainly a series of standard triads.
- bars 14-15: beginning of phrase 2 in F Dorian. The modulation is done in a rather direct manner. Over the continuing F pedal note the G chord moves over a minor second up to a Ab chord.
- the example above ends at 2:02. Theme (block) 1 continues with several more phrases.
- 3:14 Theme (block) 2.
- 3:55 Theme 1 returns.
- 5:12 The instrumental prelude returns as a postlude.

Here Zappa lets the instrumental theme follow more directly upon the sung end. This time the theme ends differently, because bar 7 from above doesn't return. It simply ends with the second chord from the 6/8 bar being sustained, thus sounding as a deceptive cadence. 5:39 End.



Village of the sun (Helsinki, 1973), opening. Transcription: KS (update Winter 2015, deposited at the I-depot, The Hague). Lead melody in bars 10-15 by W. Ludwig.





Village of the sun (Helsinki, 1974), opening. Transcription: KS (update Winter 2015, deposited at the I-depot, The Hague). Lead melody in bars 8-14 by W. Ludwig.

The 1974 Helsinki version from "YCDTOSA Vol. II" also has an instrumental prelude. It starts with a figure of two bars, played four times. It returns as a vamp for the sax solo during the interlude. It gets followed by four pattern breaking bars, before the main theme from "Village of the sun" begins. The set-up is comparable to the pattern breaking bars from "Inca roads" as played on "One size fits all" (see the corresponding section). In the example above:

- bars 1-2: the last repetition of the opening figure. It's in a 12/8 meter, or 4/4 with triplets all the time. The key is G Mixolydian with as basic chord progression a couple of times I-IV-I, ending with one time I-VII-VI 7th. The construction of the whole is such that notes and chords get mingled.
- bar 3: improvised bar with mainly Ruth on marimba.
- bar 4-5: two melodic bars, played unisono or as parallels.
- bar 6: a figure with chords with its rhythm being accelerated.
- bar 7: a bar with an E pedal by the bass and harmonic fill-in.

- bars 8-14: beginning of theme (block) 1 (F Lydian modulating to F Dorian again).

As it comes to the melodic material, also here the prelude is unrelated to the sung theme. The transition in this case could go more smoothly because G Mixolydian and F Lydian use the same set of notes. Nevertheless Zappa chose for some intermediary bars before he lets the main theme start. It's played much faster as the year before. Specific for the 1974 Helsinki version is the presence of an interlude. Compared to the two Helsinki versions, the one on "Roxy and elsewhere" is the more normal pop style version. On that album the song has an introduction by Zappa as mentioned above. On the original album edition, this intro was listed separately as a "preamble". This time there is no prelude, interlude or a postlude. It begins normally with a few introductory bars in F Lydian, the key the sung part starts with. The lead melody from the entire theme (block) 1 can be found in the Ludwig study, page 265. Ludwig notates it as 4/4 all through. Thus bars 13-14 in my 1973 example are notated as two times 4/4 instead of 3/4, followed by 5/4. This leads to a pretty heavy beat, including a key change, not coinciding with a downbeat. Rhythm and meter notation allow such differences. It turns out that also Zappa notated it that way (see below) and it's more in line with him calling this song a rock song. Wolgang presents these bars as an example of a syncope (page 118 of his study). If you notate this fragment in 4/4, it's indeed a pretty strong example of a syncope.

The following example is a contribution by Paul Strawser, dealing with theme 1 as played towards the end on "Roxy and elsewhere".

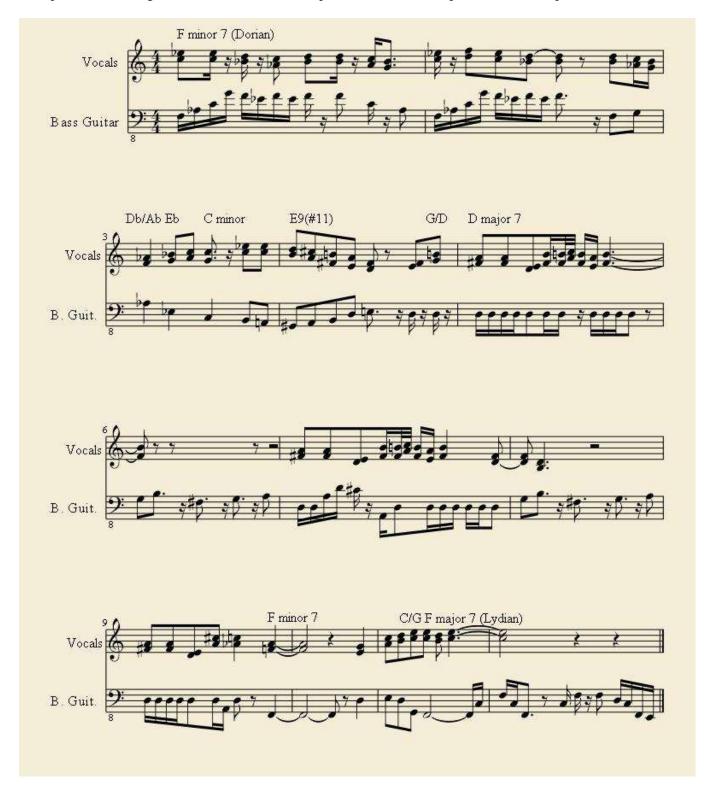




Village of the sun (Roxy and elsewhere, 1974), end. Transcribers:

- Paul Strawser (see below).

- Wolfgang Ludwig (lead melody of theme 1).
- Kasper Sloots (filling it in with further details). Update Winter 2015, deposited at the I-depot.



Section of Village of the sun, Roxy and elsewhere, transcribed by Paul Strawser.

His analysis of it goes as: "[...] a section of the chorus of "Village of the Sun" from "Roxy and Elsewhere" which begins at 3:34 in the song. I think this section is interesting due to the numerous key areas it moves through in a short period of time; beginning in F Dorian, measure 3 seems to then suggest F Aeolian, followed by contrary motion between the bass and vocal harmonies which move the key to D major by means of a fairly common II7(#11) jazz chord. The key then abruptly shifts back to F minor in measure 9 before completing a transition back to F Lydian, the key with which the verses begin."

Other than the previous two examples, the "Roxy and elsewhere" version has no prelude. It opens with a few introductory instrumental bars, common in pop songs. This time the introduction is directly related to the main song, because it starts in the same key theme 1 starts with. The opening bars of theme 1 are already included in the two 1973 and 1974 bars from above. So Paul's example completes theme 1. The bar he calls F minor can be identified as Dorian as well (the D/Db that makes the difference is absent). In this context F Dorian fits in better, because the preceding and following bar are using D natural. Paul's transcription stops two bars before the actual end of the song on "Roxy and elsewhere", so I've added these final bars to his example. These two bars offer yet again another modulation, this time to G Dorian. Again this section could also be identified as G minor (the E/Eb is absent), but because the preceding bar is using an E natural, I've notated this part as in Dorian. In the last bar the 4/4 meter gets extended with one beat with the singers saying "Well-well", this time introducing "Echidna's arf (of you)". Thus the first example from this latter song from below directly follows upon "Village of the Sun". It's done without any pause between these two tracks, as Zappa mostly does.

Theme two from "Village of the sun" is made up of two phrases, that each get repeated a couple of times:

- "Little Mary...": G Mixolydian.
- "Where the stumblers...": E Dorian, modulating back to F Lydian at the end.



Previous page: In 2018 I encountered the opening pages from Zappa's own handwritten score on the net, to be auctioned. As about always the band doesn't play it literally that way, but with an amount of liberty.

5. Echidna's arf (of you)

TWO METERS OCCURRING SIMULTANEOUSLY

The outchorus of "Big swifty" from the Waka/Jawaka section was an example of polyrhythms. Another example of such polyrhythms can be found in "Echidna's arf (of you)" from the "Roxy and elsewhere" album. The timing is equal, but the accents of the melody, played over a 4/4 motif, lie at places mostly different from this accompanying motif. During the first nine bars of this example I've used 4/4 for all parts and I've indicated the accents of the melody. The accentuated notes are also played separately on bells. From bar 10 onwards the melody is played solo, so here the melody is notated with its own varying meters. The accentuated notes are here additionally beaten on the bass drum. The "What will this evening bring me this morning" example from the Weasels section is another instance of such polyrhythms. "Echidna's arf (of you)" fluctuates between Lydian and major. It begins with the chord alternation I-II in E Lydian for bars 1-3. Next the scale becomes E for bars 4-7 by changing the A# to A natural. On beat 3 of bar 7 we get back to E Lydian. The accompanying chords from bar 5 onwards get different, in rock terms B7 (no 3rd) - Asus2 for bars 5-6 and next a stacked fourth on G# followed by D#m7 for bars 7-10. On beat 3 in bar 4 a figure begins, that lasts 11/16. Thus here you've got 11/16 played over 4/4. In bar 14 it reappears alone: now it can only be notated as 11/16. Other examples in this study that contain bars with two meters being used simultaneously are:

- "America drinks" (second example): 3/8 plus 5/8 over 4/8.
- "King Kong" (Lumpy Gravy version): 3/8 over 4/4.
- "Prelude to King Kong" (phrase two): 9/8 over 5/8.
- "Cruising for burgers": 6/8 over 24/32.
- "The little house I used to live in": 12/8 over 11/8.
- "Transylvania boogie" (Ahead of their time): 4/4 over 3/4.
- "Sofa" (1971): 4/4 over 3/4.
- "Lucy's seduction of a bored violinist & postlude": 24/8 over 7/8 plus 6/8.
- "The new brown clouds", main theme: 10/8 and 14/8 over 6/8.
- "Lucille has messed my mind up": combination of 12/8 and 4/4.
- "The blue light": 7/4 over 4/4.
- "Pedro's dowry": 12/8 over 4/4.
- "Drowning witch": 6*3/16 over 9/8.
- "The crab-grass baby": 6/4 over 4/4.
- "King Kong" ("YCDTOSA III" version): 9/16 over 12/16.
- "9/8 Objects": 9/8 over 4/4.
- "What will Rumi do?": idem.



Echidna's arf (of you), opening. Transcr.: Internet files/KS/Tom Trapp (corrections).

- Tom Trapp wrote me saying that my original choice of metres at the end was clumsy (2001):
- a) 21/16 should be divided as 4/4 plus 5/16 instead of formerly 4/16 plus 4/16 plus 5/16 plus 8/16: right, the drummer beats on C sharp instead of D, the subdivision has been corrected.
- b) Formerly 8/16 plus 3 times 11/16 plus 3/16 should be 4 times 11/16: right again, when you listen to the hi-hat, it's clear my former metres were careless.
- There are some comparable midi files of Echidna's arf on the internet. One is attributed to Craig Jones, another is anonymous. It's possible to copy anything on the net, so I can't judge what's original without further information. To avoid this problem for my files on the net, they are all included in the printed versions of my study and/or deposited at the I-depot, The Hague.





Echidna's arf (of you), section. Transcription: KS/Elmar Luksch.

Zappa liked polyrhythms especially in the shape of irregular rhythmic groupings, where the timing gets unequal, as already mentioned above. He used it a lot in his guitar solos. Occasionally he would combine tapes that were recorded independently as in "Rubber shirt" from "Sheik Yerbouti", where the interplay becomes coincidental.

The second example above stem from the middle of this song. Like Zappa mingled Lydian and major in the first example, he is here mixing B minor (Aeolian) and B Dorian. Beats 1-2 in bars 1-4 are following minor with a G natural. For the chord during beats 3-4 Zappa switches to Dorian with a G sharp. The chords are an alternation between Bm and C#m, a form of parallel playing of chord types he does more often. Next you've got a four times repeated melody of four bars. The meters in this example keep changing: 12/8, 4/4, 3/4, 6/8, 2/4, 12/8, 3/2 and 2/2. The C# of the bass serves as the tonic for bars 6 through 20. Bitonality occurs most often in Zappa's music in a mild form: the bass sets a pedal note as tonic, but the lead melody may very well take another note as the central one for a certain period. Here it happens more outspoken in the sense that two scales are used simultaneously. The C# of the bass sets the scale of the descant melody to C# minor (Aeolian), but the bass itself follows the chromatic scale for bars 5-12. Next the whole-tone scale is followed for bars 13-20 (as noted by Elmar Luksch, see the Sheik Yerbouti tango below for more on this scale). The bass plays six notes during the four-bar melody, thus exactly the amount to play once through the twelve notes of the chromatic scale and twice through the six notes of the whole-tone scale. Only at the end in bar 20, with a Bb instead of a B natural, it moves over to another figure in bar 21. Here the scale becomes A Mixolydian for bars 21 through 24, though the bass begins chromatically. While the bass holds its final A as pedal note, the melody forms a series of chords. These chords come into being by combining three melodic lines of single notes, played by different instruments. Some of these chords are uncommon, more like modern music than rock music. So you've got combinations as F#-G-C# (VI 9th of A Mixolydian or F#, no 3rd, add m2).

6. Don't you ever wash that thing

By this time Zappa had brought together a group of musicians, most of them technically well-educated and able to read sheet music, who were willing to invest their time in his music. "Roxy and elsewhere" demonstrated this. By now he had a band that was able to perform live as good as in the studio and this would continue to be so for the rest of his career, even though the line-up of the group kept on changing. A lot of new material releases could be taken from live performances. Zappa was pleased with what was going on and considered the material the band had to play the hardest repertoire he had composed so far. Indeed "Echidna's arf", "Don't you ever wash that thing" and "The be-bop tango" are for rock band standards extremely complex pieces to play live. Let's turn to the opening theme block from "Don't you ever wash that thing". This block can be divided in three parts, the first one with unisono figures, the next one polyphonic, then followed by two more unisono figures.



Don't you ever wash that thing, 0:00 till 0:14. Transcription: KS (1st printed edition, 2000). The bass plays along, except for the indicated notes between brackets, that go for both the 9/16 bars.

The first part above is a set of figures of unequal meters, rhythm and length, with variations on the I chord of C. The figures have equal pauses of 5/8 between them, where the percussion plays solo (I've notated the beats without pitch). The four figures as I hear them are:

- 4/16 (2+2), I 7th of C
- 5/16 (3+2), I 5th of C
- 9/16 (4+5), I 5th of C (1st. time); I 5th and VI 7th of C (2nd. time). Descant only, the F by the bass would extend these chords halfway.
- 11/16 (3+3+5), alteration to notes from (say) G Minor; with the last two notes we're back at the I 5th chord of C.

The next example is from the section with two- and three-part counterpoint. It gets very dense here and the band is playing it at high speed, going to the limits of what an ensemble can do. After a year of touring the tempo got even higher on "You can't do that on stage anymore, vol. II". Making a transcription of it is also like walking on thin ice, but I'll give it a try nevertheless.



Don't you ever wash that thing, 0:20 till 0:29. Transcription: KS (1st printed edition, 2000).

It starts with the trumpet and bass playing repeated motifs against the trombone. In the second bar we get to three-part counterpoint with short melodic lines. While the bass guitar is playing eighth notes diatonically, the other instruments start playing through the chromatic scale. The vibes are playing the upward movement in a straight line. The two downwards movements are played by brass instruments. It's difficult to hear every individual note for these two lines and I'm not positive about the correctness of each single note in my transcription. Probably the following order has something to do with the sequence best fit for fast playing on these instruments. Possibly the idea is the same as with the crotches of "Approximate" (see the next section). This bar is followed by bars with two-part counterpoint. Eventually the bass gives in and joins the chromatic frenzy of the other instruments.

7. Cheepnis

On the original vinyl album version the four introductions to songs, that you can find on "Roxy and elsewhere", were listed separately as preambles. Each side of the double album had its own preamble in this manner. The one from "Cheepnis" is extremely funny, as is the song itself. During the fall tour of 1973 and the spring tour of 1974 Zappa had two drummers under contract and included them both in his live set-up. Ralph Humphrey and Chester Thompson are both excellent drummers. You might think they would get in each other's way or that the drum part could get too dense, but that's not the case. In the "Roxy, the movie" film you can see how they did it. The strong drums-percussion section of this band was probably a reason to let them play "Cheepnis-percussion", being the drums and percussion part of "Cheepnis" being played solo. It sounds rich.







Cheepnis, opening. Transcription: KS (update Fall 2019, deposited at the I-depot, The Hague).

"Cheepnis" is another example of a multi-theme song, using varying meters:

- 0:00 Preamble.
- 2:09 Theme 1 in 4/4 as an instrumental intro. The bass plays along with the melody, making it difficult to clearly assign much of the song to keys. Moreover you've got notes getting altered. Theme 1 tends towards D Mixolydian, though also a Bb chord is getting used in bar 1. In his response to me, Brett Clement states: "one could make a case for D Dorian, since the melody only uses white notes, but the chords used in the full piece are not strictly diatonic: DM-BbM-CM-CM-BM". The melody of theme 1 does indeed follow D Dorian if you would listen to it separately, but why do that? Mostly it is getting harmonized with an F# from D Mixolydian. 87,5% of theme 1 is consistent with D Mixolydian. During the other 12,5% with the F turning up as natural, the chord is Bb. That's not part of D Dorian but an alteration. When listening to the whole, I see no argument to call it Dorian.
- 2:16 Theme 2. Here the changing meters come in. The length of bars 5/11 and 8/14 is speech-influenced. The instrumental figure from bars 6-7 is first played in 7/8, next in 4/4. During the first statement of theme 1 (bars 5-10), this figure from bars 6-7 is played on guitars. Bars 6-7 might be called E Dorian. During its repetition, on the other hand (bars 11-16), Zappa edited these guitars out to have it replaced by overdubbed vocal parts. You can listen at "Roxy by proxy"/"The Roxy performances" for the unedited version. Bar 17 is the drummer beating 16th notes in regular 4/4.
- 2:42 Theme 3, using 3/4 and 5/8. The example above stops at 2:48, when theme 3 gets repeated.
- 2:53 Variation upon theme 3.
- 3:02 Theme 1 with lyrics.
- 3:08 Theme 3 returns in the shape of another variation.
- 3:17 Theme 1 returns.
- 3:22 Theme 3 returns as at 3:08.
- 3:31 Theme 1 returns, ending differently.
- 3:35 Public announcement by an imaginary reporter.
- 3:57 Theme 4.
- 4:27 Chord progression after which the imaginary documentary continues.
- 4:41 Theme 4.
- 5:01 Variations upon theme 4.
- 5:15 Instrumental interlude.
- 5:26 Theme 3 returns.
- 5:35 Theme 5.
- 5:51 Theme 3 once more.
- 5:59 Variation upon theme 3 as the coda.
- 6:31 End.

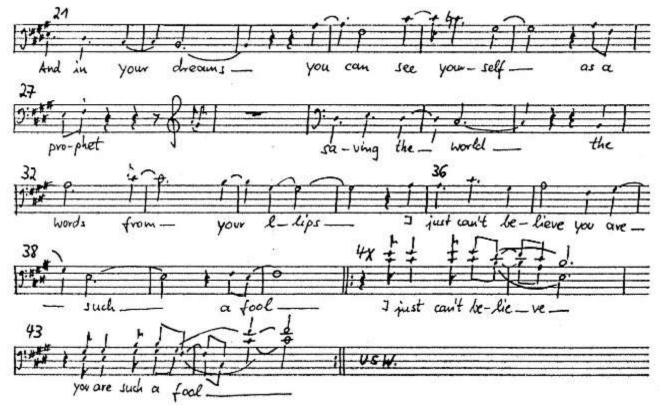
8-9. Son of Orange County - More trouble every day

Zappa always played several guitar solos during a concert and included three of them for the "Roxy and Elsewhere" album. "Son of Orange County" and "More trouble every day" were recorded in 1974, thus contributing the "elsewhere" part to the album. Apparently the recording conditions were less, for they are in mono. Zappa's decision to release them anyway must have depended upon the fact that the guitar solos in them worked out well. Both songs are continuations upon earlier material. "Son of Orange County" begins with the introductory theme for "The Orange County lumber truck" from "Weasels ripped my flesh" (included as the end of the preceding "Oh no" title). It's sung slowly by George Duke, after which a guitar solo follows. Compared to "Oh no", the tonic has moved upwards from C# to E. It causes the key to change from C# Dorian to E Lydian. A transcription of the lead melody can be found on page 266 of the Ludwig study (see the references in the left menu). "More trouble every day" is re-using the lyrics from "Trouble every day" from "Freak out!", but has entirely newly composed music of its own. The next fragment is from the "Son of Orange County" guitar solo (pitch level notation as it sounds; accompaniment left out). The accents of the solo phrases sometimes follow the rhythm of the accompaniment, but often the accents lie at other places.



Son of Orange County, guitar solo excerpt, 3:24 till 3:50. Transcription: KS (1st printed edition, 2000).





Son of Orange County, opening theme, lead melody. Transcription: W. Ludwig.

During his solos Zappa liked to keep playing in one key, but he took no limits as it comes to chord formation and rhythmic figures. About the chords he once remarked that the fun doesn't start until you'll get to the ones larger than the 5th and 7th, like 11th chords. The example above shows traditional and untraditional chords going hand in hand. The key is E Lydian, given by the accompanying scheme, which is I and II 5th/7th alternating every two bars in a 4/4 meter (the excerpt above starts with I in bar 1). This accompanying scheme is also used for the opening theme. The chords as formed by the melodic line of the guitar are:

- VI 7th (four times).
- V 5th (three times). Its chord of resolution with G sharp as passing through note in its tail. The best resolving chord according to harmony books would be II (F#), but V (B) resolves the dissonance quite well too.
- E, D sharp, B, A sharp: second plus third plus second movement, part of (for instance) IV 11th.
- E, G sharp, F sharp, C sharp, D sharp, A sharp: seconds, thirds and fourths movement, part of VII 11th.
- A sharp, F sharp etc. till the end of the example: string that is part of II 11th.

Beginning at 5:15 the main themes from "The Orange County lumber truck" return briefly. The first is in F# Dorian. The second one follows a modulation scheme: C# Dorian - E Dorian - B Mixolydian.

"Son of Orange County" is also coming by in Brett Clement's response to me regarding the avoidance of the tonic in melodies when playing in Lydian:

I introduced the idea of a "tritone restriction," as well as Lydian properties of consonance and dissonance, that helps explain this factor. In sum:

- (1) Since the Lydian tonic is the most stable pitch, it does not promote melodic motion. In other words, using the Lydian tonic melodically has the potential to create the effect of inhibiting melodic flow.
- (2) Conversely, the Lydian fourth (#4), being the most dissonant pitch, promotes melodic motion.
- (Observe that these two aspects are similar to rules in species counterpoint that advise to avoid too many perfect consonances in the middle of examples, as they inhibit forward motion).
- (3) Since Zappa is prone to use #4 melodically, there is the danger of outlined/stated tritones in the "wrong" registral order (#4 below 1), thereby violating the tritone restriction. Therefore, it is simply easier (or perhaps a logical consequence) that scale degree 1 is not used very often.



Bars from the Orange County solo (Roxy and elsewhere). The Lydian tonic E appears 12 times out of 60 notes.

A good example for demonstration. Since Zappa avoids clear outlined tritones in the "wrong" registral order, he can use the Lydian tonic as many times as he likes.

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Previous page: Brett Clement's tritone restriction regarding melodies in Lydian.

In his 2009 study he observed that Zappa is inclined to avoid the tonic in melodies when playing in Lydian. In that case the above guitar solo excerpt would be a strong example to the contrary. It now looks like he's trying to make an adjustment upon his finding. When I'm understanding it correctly, the tonic can be used as long as it doesn't follow upon a lower note #4 from the Lydian scale. In the solo example, being in E Lydian, that would mean that you can't play A#-E upwards, in which case the tonic would create a tritone dissonance. That indeed isn't happening in this example, at least not directly.

within an octave and a fifth of this range (C#4 to G#5). It should be noted, however, that while examples of Lydian-tonic avoidance abound, they do not necessarily represent a *rule*. For example, the entirely Lydian "The Black Page #1" contains a lengthy segment (mm. 9–16) in the D-Lydian mode, wherein the Lydian tonic does in fact appear. However, it occurs only twice, while all remaining pitches within the scale appear at least ten times within this same segment. Therefore, it is perhaps better to think of Lydian-tonic avoidance as a strong *tendency* in Zappa's Lydian-mode music. At the very least, one can expect melodies paired with the Lydian pedal to treat the Lydian tonic frugally.

Clement 2009, p. 128.



The black page #1, bar 10 (the bass pedal is D and the meter is 4/4).



Idem, bar 13.

His adjusted finding would put things in a different perspective. Bar 10 would be an example of a tritone violation. Bar 13, on the other hand, becomes different. Instead of being an example to the contrary, this playing of a D, following upon C# would now be ok. I haven't looked into this any further. The only thing I can say is that the tritone in bar 10 doesn't strike me as something Zappa normally wouldn't do. Another point is that Brett may be saying that Zappa is prone to use #4, this #4 doesn't get used that more often than the other notes. It seriously diminishes the effect of his 2009 finding. In most cases playing #1 wouldn't violate his tritone restriction (it only violates this restriction when played upwards after #4). It is

a fact that the tonic is being used relatively little in the melody of the "Black page" and relatively often in the solo excerpt from above. It's also a fact that this tonic could be inserted into the "Black page" on most spots without violating the tritone restriction. As far as someone finds something like this needs an explanation, I find the avoidance of a unisono or a need to confirm the tonic a more sensible reason than a tritone restriction. The first could be applied not only to Lydian. I've made some more remarks about this in the Yellow shark section at Uncle Meat, though I haven't investigated this. It can't be a strong or characteristic tendency, because examples doing the opposite exist and they don't sound untypical to me. If you do accept this tritone restriction as valid, his adjusted finding can be applied to diatonic scales in general too:

- In Ionian: don't play a higher #4 after #7.
- In Dorian: don't play a higher #3 after #6.
- In Phrygian: don't play a higher #2 after #5.
- In Lydian: don't play a higher #1 after #4.
- In Mixolydian: don't play a higher #7 after #3.
- In Aeolian: don't play a higher #6 after #2.
- In Locrian: don't play a higher #5 after #1.

See the Zoot allures section for his tritone restriction in general. This melodic consequence is identical to how Brett is talking about stacking thirds: a tritone should never affect the stability of the overall Lydian tonic of his Lydian systems.

10. The be-bop tango - The Sheik Yerbouti tango

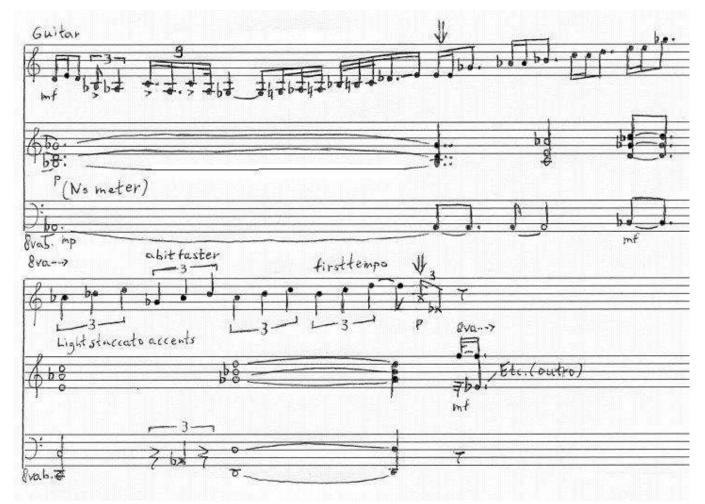
TANGOS

Zappa wrote two tangos during his lifetime, the "Sheik Yerbouti tango" and the "Be-bop tango". The next section is about this item. I've made a translation into Spanish of it because of the Latin origins of the tango. Maybe I can get Zappa added as a tango composer in general tango sites. The English version continues below as normal.

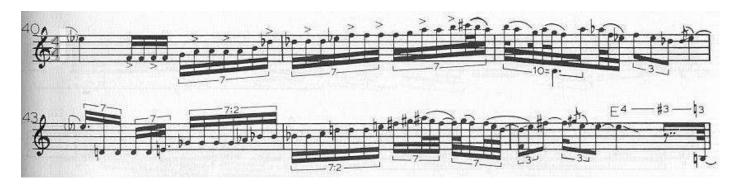
Tangos have characteristic syncopic movements in a 4/4 or a 2/4 meter, as well as melody formations and instrumentations that can be associated to the tango style. The tango as a dance had some reputation for being erotic, over which Zappa dwells upon in his preamble on "Roxy and elsewhere". The "Sheik Yerbouti tango" is a guitar solo beginning in F minor over a typical tango progression all through (as indicated by the drumset pattern). This solo is included in The Frank Zappa Guitar Book on pages 270-274. On the "Sheik Yerbouti" album this track got sped up with approximately a minor second. In the Guitar book you'll encounter the solo at its original speed, thus E minor instead of F minor. The first example below presents the opening, steadily in F minor. It stays there till bar 24 at the bottom of page 270 of the guitar book. Next the solo modulates and the use of scales becomes wilder with a lot of chromaticism. The rather elementary drum pattern continues unaltered, but Zappa's handling of the chords and scales could be called brutal compared to traditional tangos.



Sheik Yerbouti tango. Transcription: Richard Emmet (Guitar book)/KS (accompaniment and various details I hear somewhat differently).



Sheik Yerbouti tango, end. Transcription: KS (basic material by Richard Emmet).



Sheik Yerbouti tango, bars 40-44. Transcription: Richard Emmet (Guitar book).

During this solo various instances can be noticed where Zappa is applying the whole-tone scale. It stems from Indonesian gamelan music. By western standards this scale sounds awkward. It has a tritonus and an augmented fifth, but no natural fifth. Since there's no minor second in it, it's impossible to form any form of sharper dissonants with it. The scale got applied a few times by Claude Debussy at the beginning of the 20th century (like the piano pieces "Voiles" from Preludes I and "Cloches à travers les feuilles" from Images II). Sections with the whole-tone scale in the "Sheik Yerbouti tango" are:

- bars 29-31.

- bars 35-37.
- bars 40-41.
- bars 43-44.
- bars 46-47, beats 1-2.
- bars 54-57.

Bar 87 is the last bar with a normal meter. Next the drumset disappears, on the album at 3:04 seconds. Another instance of the whole-tone scale happens at the end, as above in the second on line midi file example. In the transcription I've pointed the start and end of the use of the scale in this section with arrows. For the chords you can see a series of parallel augmented fifths, the only form of triads that the whole-tone scale supports. This is the example Elmar Luksch points at in his site for the use of the whole-tone scale (see the links). Another example he found is the bass line in "Echidna's arf (of you)" (2nd example above; 1:28 till 1:34 on the "Roxy and Elsewhere" album). The fact that Zappa used the whole-tone scale during the "Sheik yerbouti tango" also gets commented upon in Guitar, October 1995: "Zappa's hammer-and-pull technique was highly, if distinctively, developed, and he used open strings in interesting ways. [Mike] Keneally points at a characteristic riff from "Sheik Yerbouti tango": "it uses open strings, and it's very whole-tone-ish - a classic Zappa riff." Dweezil explains that the whole-tone lick is accomplished by hammering and pulling on the fourth and sixth frets of the G and A strings in rapid succession [A-C#-D# with G-B-C#]. Even played on acoustic, the intervals scream Zappa."

The "Be-bop tango" opens with specific tango bars, followed by the theme itself in bar 9. When this theme enters, the be-bop element starts to dominate, with untraditional harmonic progressions and irregular rhythmic groupings. Rightfully Zappa calls this piece a hard one to play in the preamble to it. The tango theme opens with the figure George Duke later on sings on the "Roxy" version with the text "This is bebop, even though it doesn't sound like it". The "Be-bop tango" today exists in four versions. For the more complex songs for his rock band Zappa would normally write out a one or two staff lead sheet. There was no point in adding the instrumentation or further details, because the composition of the band was on a permanent change. Who specifically would play which notes would be determined during rehearsals and for each tour Zappa would add in extra bars or alter some bars. With the main tango melody in all "Be-bop tango" versions being the same, the differences lie in the additions and the solos. On the first two occasions this tango was incorporated in a larger piece called "Farther O'blivion". The "r" from farther in it makes a difference with the "Apostrophe (')" song with almost the same title, to which it is unrelated. It is performed this way on "Imaginary diseases" and the "Piquantique" bootleg. On "Imaginary diseases" it's played relatively slowly by the 10-piece "petit wazoo" band. At the end of 1972 Zappa formed what would become known as the "Roxy" band. During the fall of 1973 this latter band hand been playing the tango for some months, so the tempo could be sped up, most specifically on "Roxy and elsewhere". The "Farther O'blivion" tango had a straightforward on beat 4/4 opening. The opening on the "Roxy" album however goes as:





The Be-bop tango (Roxy and elsewhere). Source/transcription: original score combined with transcribed notes specific for the Roxy version by KS (update 2007).

On "Imaginary diseases" and "Roxy and elsewhere" the tango is followed by a trombone solo by Bruce Fowler, a normal jazz improvisation over a vamp of its own. The solos on "Piquantique" are more extensive and different in character in the sense that the solos remain more close to the tango idea. Not only the tango vamp keeps being played, the solos are as well using phrases that stem from the written theme. The sound - distorted clarinet, electric violin and guitar - is remarkable. It's a pity this version is only available with a bootleg sound quality. This Stockholm concert was filmed for TV and I was quite surprised to see a copy on YouTube with a normal sound quality. The transcription below includes the end of the guitar solo in the uncommon C Phrygian key. The "Piquantique" version is of interest as well for the

return of the theme in a different shape, played on marimba by Ruth Underwood (to the right a still from the TV show). She was the only band member who wouldn't perform solos.



Previous page: The Be-bop tango (Piquantique), section. Source/transcription: original score combined with transcribed notes specific for the Piquantique version by KS (update 2007, deposited at the I-depot, The Hague).

This variation for marimba is made up of the same notes as the main theme, but various beats get played half speed, whereas most pauses get skipped. The "Roxy" version then continues with the be-bop tango dancing event, where people are invited to dance to the ultrafast be-bop notes sung by George Duke, instead of the ongoing pedestrian beat.

For the 1992 version for The Ensemble Modern Zappa returned to the original opening bars as on "Imaginary diseases" (photo below, ZDF tv). Now all parts got fully scored out and instrumentated:



The Be-bop tango (1993), opening. Source: original score.

The scores of the lead sheet (published in 1984) and the 1993 version have been analyzed extensively and extremely detailed in an academic dissertation by William Morris Price called "An analysis of the

evolution of Frank Zappa's Be-bop Tango". William describes this piece as a multi-scale composition, rather than atonal, pointing at many melodic cells that can be related to the use of scales and larger extended "be-bop" chords as augmented 11th chords. The construction of the tango is put under a magnifying glass, showing what order exists in something what at first hearing can seem chaotic. The study can be downloaded via http://etd.lsu.edu/docs/available/etd-12092003-121423/. It includes the complete (reduced) score, spread out over the various pages. The permission by Gail Zappa to do so is included. Though the 1993 be-bop tango version can be seen as (on the verge of) being atonal, the idea that this tango was can also be interpreted as a multi-scale composition gets corroborated by the marimba variation in the "Piquantique" version. Here the accompaniment is performing a progression that more or less coerces a tonal climate upon the piece.

First a quote from William Price's analysis of the 1993 tango (pg. 142): "The first sonority in bar 9, Ab-C-D-Eb (or an Ab major triad with a raised fourth), is the most important sonority in the Be-bop Tango; it is used as the home key area [...]. The raised fourth can be analyzed as a common tone held over from the previous Bb major triad with a raised fourth, Bb-D-E-F [...]. Additionally, when the Bb major triad, Ab major triad, and their respective raised fourths, E and D, are combined they form the Ab Lydian collection [...]."

William's dissertation is specific for the 1993 version. In the transcribed "Piquantique" bars it goes on differently. From bar 10 onwards the bass and chords from staves 2-3 are largely making a movement of parallel major triads. These suggest a diatonic environment. It's a down and upward movement, the root note going from C to Bb to Ab etc. In bars 7-8 the melody starts with Ab-G-A-Bb ("This is be-bop"), with the Ab and G being only short pick-up notes. At some points the lead melody from staff 1 is moving over these chords in a chromatic manner, but during beats 2-4 from bar 9 all parts follow the C chord. In bar 13-14 you can also see a variation upon the earlier "This is be-bop" phrase. One can go on almost indefinitely pointing at characteristics in Zappa's compositions this way and the William Price study actually does so for over a 100 pages for the Be-bop tango. Many people will find such material unreadable. The benefit from it is that, no matter how unorthodox a composition is, when it sounds coherent it's always possible to detect why.

Yet again very different is the "The be-bop tango (1976)" version Ruth is playing during "The purple lagoon". The general outlines can be recognized, but at a detail level almost everything is going differently: the vamping figure with a 7/8 meter, the rhythm and the harmonies. See the Zappa in New York section of this study for the details.

ROXY BY PROXY - ROXY, THE MOVIE - THE ROXY PERFORMANCES

Inca roads (1973)

The 2014 ZFT release "Roxy by proxy" offers more from the three concerts at the Roxy theatre. It includes a version of "Inca roads", that's in between the "Lost episodes" version and the one on "One size fits all". On the "Lost episodes", "Inca roads" is all instrumental. The whole block with lyrics, that forms the opening of this song on "One size fits all", is absent. Apparently Zappa wrote these lyrics in 1973. On "Roxy by proxy" the music to it is still far away from the way we came to know it via its first release on "One size fits all". Here it begins in 12/16, loosely in C with as chord progression C-F#-F-E. Only the C and F chord belong to the C major scale.



Inca roads (1973), section #1. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).



Inca roads (1973), section #2. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

The degree of improvisation during this opening block is high, sort of a lounge version by jazz musicians. This specifically goes for the melody George Duke is singing for the words. Only roughly it resembles the final "One size fits all" melody. At this point the meter has changed from 12/16 to 4/4 (a bar still lasting the same time, thus only the subdivision of a bar has changed). Bass and drum are in standard 4/4 while George is at several points singing and playing over it in a rubato form, which makes a transcription of it complicated. See the One size fits all section for more from "Inca roads" and the Shut up 'n play yer guitar

section for guitar solos taken from it.

The Roxy concerts were filmed and fans have been pressing the ZFT for years to release the Roxy footage. Apparently there were some problems with the synchronicity and the ZFT has been seeking means to raise funds. At the end of 2012 they gave fans an opportunity to buy a copy of the mastertapes with a right to distribute it, under condition that the ZFT would receive a royalty per sold copy. In 2015 the "Roxy, the movie" CD and DVD got finally released. All sources combined, the so-called Roxy band, playing during 1973-4, is now very well covered. More from this band in the next section. In addition to this, the ZFT released all of the Roxy concerts as a seven-CD set in 2018, called "The Roxy performances".

Dickie's such an asshole

Zappa himself only used some samples from the Roxy footage for his later videos. Three more tracks from the Roxy gigs were included in the "YCDTOSA" series. "Dickie's such an asshole" is a song from the Watergate era, but only premiered in the political context of "Broadway the hard way" from 1989. Next are two examples from this song from the Roxy version, that you can find on "YCDTOSA Vol. III". The larger part of "Dickie's such an asshole" is based upon blues schemes. The first example below is blues in B Dorian, on some steps of the scheme also using B major, a common practice in minor type blues. The standard scheme gets extended with a number of additional chords.





Previous page: Dickie's such an asshole, section #1. Transcription: KS (update winter 2014, deposited at the I-depot, The Hague).





Dickie's such an asshole, section #2. Transcription: KS (update winter 2014, deposited at the I-depot, The Hague).

The blues scheme appears in the following manner:

- Pick-up bar: I. The song begins with the band singing over the I chord. Only its tail is included in the example above.
- Bars 1-2: IV. In bar 2 you can see that Napoleon is singing this song in a rubato manner, leading to figures that can look odd on paper, as in bars 4-5.
- Bars 3-4: I. On beat 2 a lick enters the picture, that keeps returning during this song.
- Bar 5: The standard V from the blues scheme becomes II-III-V. This is the bar where the scale used has become B major instead of B Dorian.
- Bar 6: The standard IV from the blues scheme becomes I-II-IV. We're back at B Dorian. Step IV is only briefly present and the harmonies get extended via combining the bass E with Bm7. When this 7th chord resolves to E, the bass is already chromatically moving over to B.
- Bars 7-8: I. These bars contain repeated notes in an irregular rhythm, like a radio or TV news jingle.

The second example above appears half way this song. Here the blues scheme is left and F# becomes the tonic for a longer period. Many examples in this study include details, whether improvised or not. For analytical purposes it's sometimes necessary that at least you listen to them, or else you might identify the scales and chords wrongly. Zappa's music is highly flexible in this aspect, leading to many version differences. For the composed rhythms this is different. He seldom changed the rhythm of his songs and he would not allow any deviation from what he prescribed. Via the details in the section below you can see that this part is simultaneously using F# minor and F# Dorian. The difference lies in the D from the minor scale and the D# from the Dorian variant. The repeated bass patterns goes as I-II-III-II in 12/8. It

gets interrupted by bars 5-6 with just the E7 chord (the instruments together), add F# (Napoleon).

- Staff 1, Napoleon: F# minor.
- Staff 2, FZ: F# minor (bars 1-6), F# Dorian (bar 7).
- Staff 3, George: F# Dorian.
- Staff 4, Ruth: F# Dorian.
- Staff 5, Bruce: F# minor.
- Staff 6, Tom: indeterminate (the D/D# isn't used).

YCDTOSA II - A TOKEN OF HIS EXTREME: VERSION DIFFERENCES AND ROUTINES

During most of 1974 Zappa continued to tour with the band, that had performed at Roxy. At first only few live recordings from 1974 were used for the albums. The "elsewhere" part form "Roxy and elsewhere" is from 1974 and "Inca roads" from "One size fits all" includes live-recorded tracks. This would change later on, also because of the popularity of "Roxy and elsewhere" among fans. So volume II of "YCDTOSA" is entirely devoted to the 1974 concert at Helsinki. Zappa also made a video of a live performance at KCET studios, combined with clay animations by Bruce Bickford. The intention was to have it broadcast by tv stations, which succeeded in France and Switzerland. In the 1980s material form this video got included in "The dub room special" video, that he distributed himself. It's a combination of footage from a 1974 concert and the 1981 "You are what you is" MTV-concert, augmented with interviews and the clay animations by Bruce Bickford. Bootlegs from the tv broadcasts circulated as "A token of his extreme", the title given by Zappa himself. In 2013 the ZFT released the original video in its entirety.

Approximate

Both on the "Helsinki" concert and the "Dub room special" a performance of "Approximate" is included. The "Helsinki" CD has the complete execution, but the "Dub room special" has as a special treat that parts of Zappa's handwritten scores are shown. "Approximate" is a piece with four ultrafast written themes and four improvised solos. These written melodies have irregular rhythms played over 4/4 and the idea of the composition is that these themes can be played thus fast, that the pitches of the notes with crotches don't have to be accurate, as long as the rhythm remains correct. As Zappa explains in the "Wazoo" booklet: "In this selection the choice of the pitches played by each musician is left up to him (or her). There are only a few bars in the whole piece where a pitch is specified (and those bars are installed for contrast). The rest of the sheet music is filled with note stems and braces connected to little "X" marks, indicating by their position in the staff the approximate register of the instrument in which they are to occur. The players are requested to adhere to the rhythmic schematic which organizes the time-space relationships between the bunches of "X's".

First the opening theme is played instrumentally, next sung and then danced. It's quite funny on the videotape. The "Helsinki" recording thereafter continues with an entire performance:

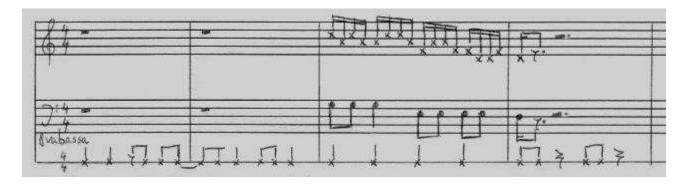
- 3:26 Theme 1.

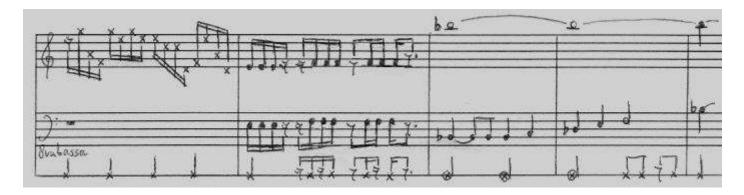




Approximate, opening. Source: some bars of the original score as presented in the "Dub room special" combined with transcribed notes by KS (update 2007).

- 4:03 Guitar solo 1.
- 4:39 Theme 2.
- 4:44 Drum solo.
- 5:20 Theme 3.





Approximate, theme 3. Source: bars of the original score as presented in the "Dub room special", combined with some transcribed notes by KS (update 2007).

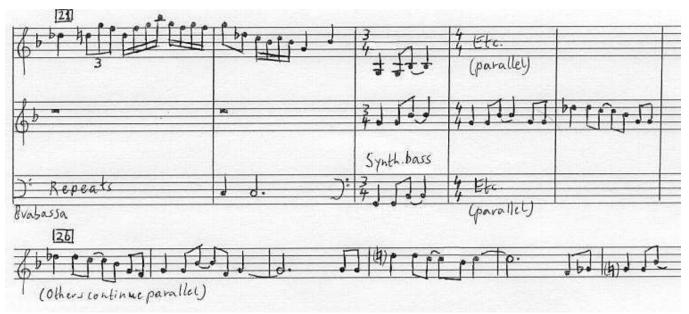
- 5:25 Keyboard solo.
- 6:01 Theme 4.
- 6:09 Guitar solo 2.
- 6:47 Theme 1.

I continue with this composition in the Zappa in New York section, where this title re-appears as "The purple lagoon/Approximate", thus in combination with another title. One can also compare this piece with "Little dots" from the Wazoo section. As I'm interpreting it, Zappa is doing something similar in the latter composition, but switching the parameters around.

Pygmy twylyte

Other than the pieces from the previous Roxy section, "Pygmy twylyte" is a song relatively easy to perform. It's mostly in 4/4 and its main theme is a single melodic line without rhythmical difficulties. The theme is in Bb Lydian for bars 1-12. The sax is at some points blowing some chromatic notes, along with indeterminate guitar noise. Next the guitar part from bars 13-14 modulates the song to a G minor type of scale, where it stays till bar 28 (except for the guitar solo bars). The D is altered to Db during these bars. So it's not exactly G minor, but a minor variant (the A/Ab and E/Eb aren't used, so the exact complete scale can't be identified here). For the guitar solo bars (19-22), the pedal note changes from G to C. Here Zappa is using both D and Db, again making it difficult to assign the notes to a scale (there is some keyboard harmony in bar 19 here, with a C and an E chord). After this solo you've got a one-time only bar in 3/4. The 8 minutes 1974 Helsinki version is quite enriched compared to the 3 minutes 1973 Roxy version. It has additional themes and a fine guitar solo in it.





Pygmy twylyte (1974). Transcription: Wolfgang Ludwig (1992) with some guitar bars from the 1974 version by KS (update 2007).





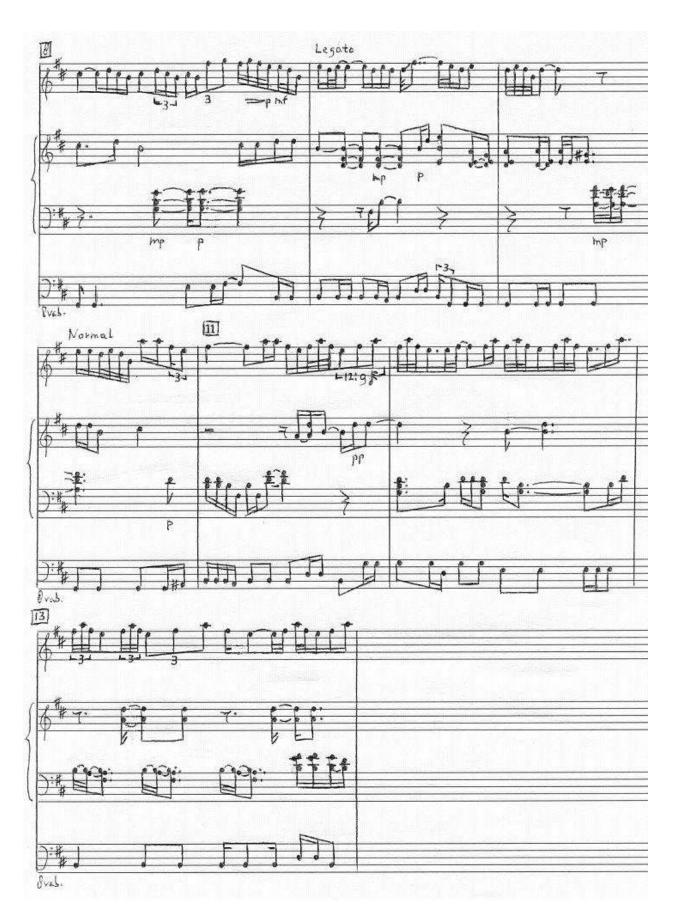
Previous pages: Pygmy twylyte, solo section (Helsinki). Transcription: KS (update January 2014, deposited at the I-depot, The Hague).

This solo takes up half of the time of the track. It begins with a chord progression in straightforward 4/4: Bm-G-Bb-C-A (bars 1-4). Thus one minor triad, followed by four parallel major triads. The solo is in B minor, so in the transcription the opening is also notated this way. The soloing in bar 5 begins with variations upon a very small cell, C#-D-C#, with Zappa taking many pauses between these variations:

- bar 5 beat 1: C#-D-C#.
- bar 5 beat 2: Pause with only a string lightly scratched.
- bar 5 beat 3: C#-D-C#-D, an octave higher. The rhythm of the cell and the notes are slightly varied upon each time.
- bar 5 beat 4: Pause and a C# just before beat.
- bar 6 beat 1: D-C#-D.
- bar 6 beat 2: Pause.
- bar 6 beats 3-4: Half-pausing, half a little figure with F#-E.
- bar 7 beat 1: Pause and C#-D before beat.
- bar 7 beat 2: C#-D-C#.
- bar 7 beat 3: Pause.
- bar 7 beat 4: Pause and B-C# before beat.
- bar 8 beat 1: B-C#-B, thus the figure from bar 5 now on B.
- bar 8 beats 3-4: Pause with only a little scratching of a string during beat 2.
- bars 9-10: The cell is left and a new theme enters the scene with a repeated F#, rhythmically dominated by 16th notes. This returning F# was already briefly touched upon in bar 6.
- bars 10-12: Variation upon this new theme.
- bar 13: Another variation, where the repeating F# is replaced by a repeating E. The rhythm becomes more varied.

The cell from bar 5 and the theme from bars 9-10 are thus opposites because of their length, but both get rhythmically and melodically varied upon. It's the standard way Zappa of how improvises during much of his soloing, combining it with a total harmonic freedom: coming up with thematic material and varying upon it at will. See also the "Mo' mama" example from the Sheik Yerbouti section. The interesting part here is the presence of many pauses during bars 5-8, a less common way of beginning a solo. It makes the keyboard accompaniment by George Duke come out quite effectively. The bass follows a progression of two bars: one bar with a B followed by one bar with G-E moving back to the tonic. The G takes up a dotted quarter note, the E the remainder of the second bar.





Previous pages: Pygmy twylyte, solo section (A token of his extreme). Transcription: KS (update January 2014, deposited at the I-depot, The Hague).

Note: the curve in the bass line between brackets in bars 1-3 is roughly something what you can see Tom Fowler do on the DVD - and Zappa on his guitar - but I can't exactly hear what's going on. The sounding result of both, and the synthesizer, is approximated via the notated notes in staff 1. Probably they did the same during the Helsinki concert.

The "Pygmy twylyte" version you can hear on the "A token of his extreme" DVD was recorded in August 1974, a month earlier than the Helsinki concert from September 22nd. The differences in the non-improvised bars and staves are thus minor, but of course the solo is another one (to the right: FZ playing this solo, source: A token of his extreme DVD). When you're doing a tour with dozens of venues it becomes likely that the solos get common elements. Till 2017 no series of entire solos were available, but you can see here that the C#-D-C# cell from above is also present in the shape of some sort of an irregular tremolo when the "A token of his extreme" solo starts. It takes up the first three beats of the opening theme (bars 5-6). This theme gets varied upon in bars 7-8. The next element to get varied upon over a longer period is a group of three notes, E-F#-A. Setting of in bar 10, beat 4, you can see a string of notes with little rhythmic figures using these notes till bar 13 in the example. Other than the Helsinki solo, Zappa hardly pauses during the last example. The keyboard playing is now present as standard background harmony. The bass pattern is much looser. Still it's B-G sometimes followed by E, but it hasn't the rhythmic pattern as on the Helsinki version.

The idiot bastard son

"The idiot bastard son" is present in Zappa's catalogue in four different shapes. The original recording stems from 1968 for the "We're only in it for the money" album. In 1984 Zappa recorded the bass and drum part anew and remixed the other parts. This later version is now available on "Lumpy Money". A piano arrangement by Ian Underwood got published in the "Frank Zappa Songbook vol. I" from 1973. This version is closer to the way the band performed this song live, as you can hear it on YCDTOSA vol. II. When the band starts this song on this album, they return to some riffs from "Pygmy twylyte". In between comes the opening lick from "The idiot bastard son". In the following example bars 1-2 and 6-7 stem from "Pygmy twylyte". In between you have phrase 1 from theme 1 from "The idiot bastard son". It's played via triplets in bars 3-5. Bars 6-8 demonstrate various forms of syncopes. Bars 8-9 move over to theme 1 from "The idiot bastard son" with the last chord being held for a while. Napoleon Murphy Brocks starts with the first note from the lead melody, also held longer. So it doesn't function as a pick-up note, which might explain the little inequality at the beginning of theme 1 (staff 2 compared to the others in bar 1, 1974 theme 1 example from below). Theme 1 begins slower than the intro. Because phrase 1 is played via triplets at first, it returns almost twice as slow at the beginning of the main part of this song. The intro starts in B minor moving over to D Dorian for bars 2-5. At this specific point the music is purely Dorian and can only be interpreted as Dorian.



It's also the way Ruth Underwood plays the sequence of sus2-chords from bars 3-5 on the Classic albums DVD (image above), calling it the "definitive Zappa sound". By the way she's holding the sticks, it can be seen that this figure gets voiced as follows:



When you play it like this for the general public, all by itself, you're making it sound as D Dorian or minor. This figure with sus2-chords re-appears during theme 1. In that context it can be interpreted differently (see below). For bars 6-9 the music modulates to D. The last two beats of bar 9 evade from this key. It ends with what you might call a Bbdim chord plus A.



Previous page: The idiot bastard son, intro. Transcription: KS (update January 2014, deposited at the Idepot, The Hague).

While the meter of the main part of "The idiot bastard son" is constantly 3/4 and its rhythm pretty standard on beat, the use of scales in this song is highly flexible. It's one of the many songs that are identified as multi-scale in the table from my Burnt weeny sandwich section. The structure of this song is in all four versions the same, except for the intro from above (1974 version only) and the interruption/outro with spoken text (1968/84 recording only). The pitches in the three versions below are transpositions. The original begins on E. For the 1984 version Zappa sped up this track, to the point of transposing it a minor second up, so that it begins on F. The 1974 version is lower, beginning on D. The differences between the 1968 and 1984 transcriptions are not only caused by the newly recorded bass, but also by remixing. The accompaniment is made up of 4 to 6 tracks. By mixing some parts in or out you get the picture from the transcriptions, which represent the audible parts in reduced form. There are, of course, no newly recorded accompanying tracks. The timing below, and the pitches, follow the 1974 version. The numbering of the bars applies to every version.

0:00-0:18: Intro.

0:18-1:03: Theme 1. Theme 1 is made up of three phrases, of which the third is a variation upon the first.

- bars 1-3: phrase 1.
- bars 4-8: phrase 2.
- bars 9-25: repetitions.
- bars 26-30: phrase 3.

How the scales of theme 1 can be identified depends upon how you look upon it, which version you take and which specific bars you're looking at. It can lead to contrary results, though not in direct conflict with each other:

- a) One could look for sections where the pedal note is relatively stable and group the notes used. Then the scale could be identified as D minor or Dorian for bars 1-3 (1974 version only) and B or C Dorian for bars 7-8 in the 1968/84 versions. So this standard approach explains relatively little. Other instances of phrases 1 and 3 point at parallel playing only and the Dorian pedal in bars 7-8 in 1974 is weak. Moreover the final bar moves over to another pedal note.
- b) Phrases 1 and 3 can be seen as a form of parallel playing. These parallels are perfect for phrase 1 from 1974 and the representation in the Songbook. Other instances are more variants upon this. Parallel playing soon gets incompatible with following one scale, like the F-F# conflict during phrase 3. In my opinion parallel playing can best be identified as the first chord indicating a scale. Next the following chords should be seen as transpositions of that scale. Phrase 1 begins with just D2 (1974) and nobody playing over it, giving too little clues for a scale. But in phrase 3 it becomes D add 2, thus implying a major type of scale. For another example of parallel chords, see the "Bwana Dik" example, bars 9-13.
- c) Because the pedal note keeps moving for most of the song, one might also take each instance of a pedal note as equal. In this case this approach proves to be the most fruitful, because all versions can be explained in this way in the same manner by transposing the scheme. The scales below are chosen to explain all versions. When you also identify the scales in a way that they alter the least notes from one bar to another (whether actually used or not), you get the picture below. The scales for phrases 1 and 3 can be taken as the same.
- Bar 1: D Mixolydian.
- Bar 2: F Lydian.
- Bar 3: D Mixolydian.
- Bar 4: E minor.
- Bar 5: C Lydian.
- Bar 6: D Mixolydian.
- Bars 7-8: A Dorian chromatic.

- Bars 9-26: repetitions.
- Bar 27: D Mixolydian (1974 only).
- Bars 28-29: F Lydian (1974 only).

Other than the 1974 version, the 1968 and 1984 versions use different pedal notes for phrases 1 and 3. These last two end with using Dorian and major instead of Mixolydian and Lydian, caused by the bass playing a fourth lower or a fifth higher. The bars that go as bars 7-8 in 1974 always have an individual extra with a couple of chromatic notes, almost directly following upon the brief A pedal (the A lasting only one beat). Two such instances are included in the 1974 example below.



Previous page: The idiot bastard son (1974), theme 1. Transcription: KS (lead melody taken over from the Songbook; update January 2014, deposited at the I-depot, The Hague).



The idiot bastard son (1968), theme 1. Transcription: KS (lead melody taken over from the Songbook; update 2014, deposited at the I-depot, The Hague).



The idiot bastard son (1984), theme 1. Transcription: KS (lead melody taken over from the Songbook; update 2014, deposited at the I-depot, The Hague).

1:03-1:27: Theme 2. This theme is also made up of three phrases:

- bars 30-35: phrase 1, following G Mixolydian in bars 30-33 and C in bars 34-35.
- bars 36-38: phrase 2. The music now continues chromatically as shown in the next example. Most of it is identical to the Songbook. Thus also here with the A13(b9) chord in bars 36-37 and the counterpoint figure by the bass during bar 44.
- bars 39-41: the lead melody is a transposition of phrase 2.
- bars 42-45: phrase 3. During bars 44-45 the music has become diatonic again, moving from D to D Mixolydian.



Previous page: The idiot bastard son, section. Notes/transcription: Songbook, adapted to the 1974 album version by KS (update January 2014, deposited at the I-depot, The Hague).

- 1:27-1:59 (bars 46-67): Variations upon theme 1, phrases 1-2.
- 1:59-2:14 (bars 68-77): Add-in. Bar 68 begins in E minor, next the music continues in C Lydian.
- 2:14-2:19 (bars 78-80): Theme 1 continues with phrase 3.
- 2:19-2:39 (bars 81-94): Theme 2 returns.

VERSION DIFFERENCES

The two above songs are only two examples of numerous version differences. They form an important factor in Zappa's music, reason why still relevant releases from the tape vault are appearing. Short descriptions of all versions differences can be found at the http://globalia.net/donlope/fz website. Other examples that are coming by with note examples in my study are:

- "Why don't you do me right": Paul Buff section.
- "Status back baby": Projects section.
- "How could I be such a fool": Ruben and the Jets section.
- "No, no, no" and "Stuff up the cracks": Ruben and the Jets section.
- "Uncle Meat", "Dog breath" and "Exercise #4": Uncle Meat section.
- "King Kong": Lumpy gravy, Uncle meat, Hammersmith Odeon and YCDTOSA sections.
- "Rudy wants to buy yez a drink" and "Transylvania boogie": Chunga's revenge section.
- "Chunga's revenge"/"Chunga's basement": Chunga's revenge and the Bootleg and archive recordings sections.
- "Who are the brain police?": Bootleg and archive recordings section.
- "Do you like my new car"/"The groupie routine": Fillmore East 1971, section.
- "Nun suit": 200 Motels section.
- "The girl's dream": 200 Motels section.
- "200 Motels the suites"/"200 Motels" 1971 scores: 200 Motels section.
- "Big swifty": Waka/Jawaka section.
- "One shot deal"/"Frog song": Waka/Jawaka section.
- "Farther O'Blivion": Imaginary diseases section.
- "The be-bop tango": Roxy and elsewhere section.
- "Cucamonga"/"Farther O'Blivion": Bongo fury section.
- "Duke of prunes", "Music for low budget orchestra" and "RDNZL": Orchestral favorites section.
- "Bogus pump": Orchestral favorites and the L.S.O. sections.
- "City of tiny lights": Philly '76 section.
- "Manx needs women": Zappa in New York section.
- "The black page #1/#2": In New York, Sheik Yerbouti, YCDTOSA and Make a jazz noise here sections.
- "On the bus" and "Occam's razor": One shot deal section.
- "Stinkfoot": Halloween section.
- "Tush-tush-tush"/"A token of my extreme": Joe's garage section.
- "Peaches en regalia"/"Peaches III": Hot rats and Tinsel town rebellion sections.
- "The perfect stranger" and "Naval aviation in art?": Perfect stranger section.
- "No not now"/"Won ton on": Thing-Fish section.
- "Honey, don't you want a man like me?": YCDTOSA section.
- "The torture never stops": Zoot allures, The man from Utopia and The best band sections.

Version differences that get referred to:

- "Black napkins"/"Pink napkins": FZ plays FZ and Shut up 'n play yer guitar sections.
- "Watermelon in Easter hay": Joe's garage section.

- "Easy meat": Tinsel town rebellion section.
- "The deathless horsie": Shut up 'n play yer guitar section.
- "Zomby woof": Best band section.
- "King Kong" (1988)/"Diplodocus": Make a jazz noise here and Trance-fusion sections.

Room service





Room service, opening. Transcription: KS (update January 2014, deposited at the I-depot, The Hague).

"Room service" belongs to a series of folklore songs, in which there was plenty of room for textual improvisation. To the right Napoleon Murphy Brock holding his oversized phone (source: A token of his extreme DVD). Zappa mostly included one or two of such songs in every tour. The differences in the prescribed parts can be small, but the improvisation kept developing itself into different directions each night. So you can hear what happens to "Room service" in a month by comparing the "A token of his extreme" and "YCDTOSA II" versions.

The example from above deals with the opening, the composed section. It's a sequence of riffs of one bar, each repeated a number of times:

- bars 1-4: a I-III-IV progression in B Dorian. The meter is 5/4.
- bars 5-8: a single melody played by the band in parallels. The meter is 4/4, but via a tempo change the set-up of this song is such that the 5/4 and 4/4 bars last just as long. During beats 1 and 3 a septuplet is being used. So the rhythm of this song at this point gets pretty complex. Beats 3-4 follow the same rhythm as beats 1-2, while the melody is much different. Staff 1 is Napoleon cheering over it.
- bars 9-12: variation upon the riff from bars 1-4. In this case there's an additional upwards line during beat 5. Staff 3 represents the marimba part by Ruth. She's playing a chromatic string about as fast as possible. You can't play a figure like that as a glissando or some sort of an arpeggio on a marimba, you actually have to hit each woodblock separately.
- bars 13-14: progression of two chords, B and Bm7. The first one might imply a switch to a major tonality, the second one immediately returns to B Dorian.
- bars 15-16: improvisation over B pedal. This continues for quite a while before another riff enters the picture and the dialogue starts. Zappa starts playing a couple of melodic notes on his guitar, but then continues as a rhythm guitar. On "A token of his extreme" he immediately starts playing this way. It's only these improvised elements that make the difference between the two versions for the bars in the examples presented here.

On album the song goes on as:

- bars 17-31: the improvisation from bars 15-16 is maintained for another 15 bars.
- bars 32-33: drum solo.
- bars 34-41: another riff. Smaller time units are getting the upper hand here, so I've split a 4/4 bar into two 4/4 bars. The indicated time change is solely caused by this change in notation. One might also decide to already take this step at bar 15. The pedal note has switched to E and the melody/harmony is combining E minor and E Mixolydian. In bar 34, beats 1-2, you have C/G natural (E minor). In bar 35, at the start of beat 2, you find C/G sharp (E Mixolydian). G natural and G sharp keep alternating.
- bars 42 till the end: vamp for the dialogue. It begins with another progression in B Dorian, I-VII-IV-III. The vamp soon gets flatter and flatter, till only the drum remains as accompaniment. Other than in the "Dummy up" routine from "Roxy and elsewhere", Zappa here lets the text largely prevail over the music. Towards the end however the music returns with yet another riff in B Dorian. This time with the progression: I-I-I-III-IV. It's also used as the coda for this song.



Room service, section. Transcription: KS (update January 2014, deposited at the I-depot, The Hague).

Dummy up

"Dummy up" and "Room service" are two examples of a number of story-telling routines Zappa and the band did during his career. Mostly these have a vamp for a minimal musical accompaniment. Here it's a little bass theme of two bars, forming the chords I 7th and II 7th in B minor. The two root notes of these chords alternate B and E, or I-IV. Rhythmically this bass theme is half on-beat, half syncopic.



Dummy up, opening. Transcription: KS (update January 2014, deposited at the I-depot, The Hague).

The two phrases of the theme both stop about halfway the bar. Ruth on bells and George on synthesizer provide a harmonic fill-in. The central chord for the synthesizer is Bm7, that can appear along both bass phrases. The story in this case is about somebody walking downtown (Napoleon), encountering a dope pusher (Jeff Simmons). Both get co-credited for their contribution to this song.

LIVE ROUTINES

Compared to other rock bands Zappa's concerts and his stage behaviour were rather static. It was all about the music, so there was little dancing and there were little visual effects. Zappa compensated for this by addressing himself to the audience frequently and sometimes include audience participation events. So you have pieces like:

- "YCDTOSA IV": "Tiny sick tears". One earlier example from the sixties.
- "Fillmore East": "The mud shark". Zappa is retelling a story that he got to hear from the Vanilla Fudge during their stay at the Edgewater Inn. Towards the end Flo and Eddie start singing along the vamp and Ian Underwood joins in with arpeggio movements on his keyboard.
- "Fillmore East"/"YCDTOSA I": "Do you like my new car?"/"The groupie routine". See the Fillmore East section.
- "Roxy and elsewhere": Preambles. The original album listed Zappa's four introductions to his songs as individual introductory tracks for each of the four sides of this double album. This is plain spoken text without the band playing.
- "In New York"/"Baby snakes": intro to "Punky's whips", respectively by Don Pardo and Zappa himself.
- "YCDTOSA VI"/"Baby snakes" DVD: "The poodle lecture". This is an instance where you can actually see Zappa doing such a routine on DVD. He carried around a large toy poodle.
- "YCDTOSA VI"/"Hammersmith Odeon": "Is that guy kidding or what?"/"I have been in you" intro. See the Sheik Yerbouti section.
- "Buffalo": "The "real world" thematic extrapolations". A very long outro for "Dancing fool".
- "Tinsel town rebellion": "Panty rap". See the Tinsel town rebellion section.
- "Tinsel town rebellion": "Dance contest". Idem. One example of Zappa inviting members from the audience to come dance on stage, as first recorded during the "Be-bop tango" from "Roxy and elsewhere". On the "Baby snakes" DVD you can see such an event taking place.

Dupree's paradise (1974)

"Dupree's paradise" is one of the four songs in this study, that Zappa performed during the 1973-4 tours, but only got released years later. The other examples are "Approximate", "T' Mershi Duween" and "Dickie's such an asshole". "Dupree's paradise" first appeared on record in 1984, re-using the central theme, but with a large newly composed block between this opening theme and its reprise. See the Perfect stranger section for examples from the "Dupree's paradise (1984)" execution. The 1974 version from "YCDTOSA vol. II" fits in well in this section because of the two routines included in this song and, again, the version differences. The set-up of the 1974 rendition goes as:

0:00-1:31: Block I, Fingercymbal routine.

The song opens with Zappa explaining how George Duke is going to hurt himself while playing a fingercymbal, presented as some sort of quasi-SM. It's thus thoroughly stupid, that you keep laughing about it, no matter how often you listen to it. This applies to most of the routines, preambles etc. on Zappa's records. The humor in it is sufficient enough to be able to keep listening to these texts, even though you know exactly what Zappa is going to say. To the right George and his fingercymbal at KCET studios.



Dupree's paradise, fingercymbal-keyboard transition. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

1:31-6:08: Block II, Keyboards and lyrics extravaganza by George Duke.

The first example above is a transcription of the last seconds of the fingercymbal act, followed by the opening chord progression of the keyboard solo. The first two bars contain a series of triads moving through various scales. Next this section is getting wild with George improvising on his synthesizer along with telling a little story. Zappa introduces it with "The Modest Moussorsky's songbook presents". Similar performances like this block got released as individual tracks. You can find "The booger man" and "Smell my beard" on "YCDTOSA vol. IV", and "Earl of Duke" on "A token of his extreme".

6:09-7:26: Block III, Hotel towels routine.

The song continues with the band getting caught at the customs control for stealing hotel towels. Again it's very funny. The topic already got a prelude in the preceding song, "Approximate", with Napoleon saying "we tried to pay for them". The next example contains the end of this episode, followed by the main theme from the written "Dupree's paradise" score.





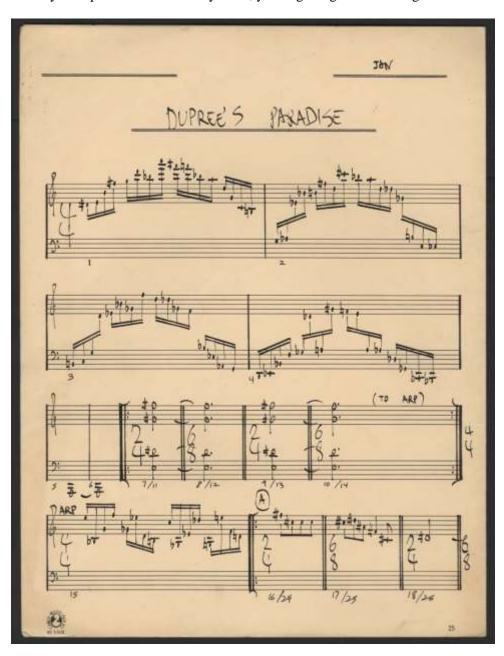
Dupree's paradise, hotel towels - main theme, phrase 1.

- Hotel towels part: transcription: KS.
- Dupree's paradise bars 1-4: combination of the original score and transcribed notes by KS.
- idem, bars 5-14 and bars 16-19: original score, adapted to the 1974 version by KS.
- idem, bar 15: transcription KS.

Everything: update June 2014, deposited at the I-depot, The Hague.

7:26-8:24: Block IV, Main theme.

The main theme from "Dupree's paradise" is a composed part of two sheets with 63 bars (repetitions included). Recently I found two original examples in Zappa's handwriting being auctioned. They are both keyboard parts. The first has "Ian" in its header, thus written for Ian Underwood for the 1973 tour (Ian would leave the band during the fall of 1973). The other has no reference to an instrument or person, but, seen the positioning of the notes, can only be another keyboard part. Below I'm referring to these parts as keyboard #1 and #2 respectively. It's not certain if these two sheets were meant to be played jointly, but it's very well possible to do so. If you do, you're getting the following:





Dupree's paradise, samples of the keyboard parts (original score).

The construction of the main theme is as follows:

Prelude:

- Bar 1: an atonal string of 16th notes, mostly going up and down. By the method of counting the amount of minor second steps in an interval, these intervals in numbers are: 1-7-7-1-7-4-11-3-1-7-1-7-7-1 for keyboard #1 and exactly the same for keyboard #2, but beginning a fourth higher. The fifth and next the minor second appear most often in the series. On album bars 1-4, by Ruth Underwood on marimba and George Duke on keyboards, are a variation upon the prescribed bars. It's something Zappa allowed. In the liner notes he states that the band could play this music blindfoldedly after a year of touring and it's not really difficult. No way George and Ruth are missing notes in cases like this. Thus once again you have an album version that, to a certain degree, goes different from the written score. The accelerando on album is also not prescribed in the score.
- Bars 2-4: the string returns three times, each time starting lower: D#4 for bar 1 gets followed by G3 for bar 2, B3 for bar 3 and D2 for bar 4 (keyboard #1). Keyboard #2 is a major third higher during bar 2, a fourth again during bar 3, and a fifth during bar 4. Quite obviously bars 1-4 form a sequence.
- Bars 5-6: A and E pedal for the two keyboards respectively. On album it's a bass E pedal with the Emchord (no 3rd).
- Bars 7-8: Keyboard #2: vamp for the upcoming phrase 1 of the main theme. It's played via a 2/4 plus 6/8 meter. The chord is an easy example of what I call using a scale as a harmonic field. In this case all seven notes from the E Lydian scale get played at once: E-D#-G#-F# by the sustained notes and the remaining B-A#-C# combination by the repeated chord. Keyboard #1 only plays the sustained notes. On album this keyboard #2 vamp isn't played at all. Here the seven notes appear as a broad chord by the guitar and

keyboards, played over E-pedal by the bass with a B ticking in the background. On album the meter notation is only recognizable via the drumbeats and the pulsing B.

- Bars 9-14: bars 7-8 repeat three times.
- Bar 15: a pattern breaking bar in 4/4. After the opening sequence the composition gets tonal, but this bar interrupts this. Zappa liked to do things like that; see also the One size fits all section with an example from "Inca roads". The series of 16th notes is in this case deliberately irregular. The interval numbers are 18-9-10-11-9-13-3-13-18-9-10-18-21-11-3, thus without a pattern. On album this bar gets filled in in an improvised way. It doesn't even look similar, except for that it's atonal as well. "To ARP" in the keyboard #1 part stands for a switch to a synthesizer type, ARP being a synthesizer brand from the seventies.

Phrases 1-3:

- Bars 16-19: phrase 1 form the central theme. The central theme gets indicated as "A" in the keyboard scores. Keyboard #1 plays the melody, keyboard #2 the vamp. Phrase 1 gets subdivided into two subphrases of two bars, the second sub-phrase being a variation upon the first. On album the accent of the pedal note switches from E to B, thus an argument to call the composition B major at this point. 1973 performances of this song as released on the 2014 ZFT CDs "Road tapes, venue #2" and "Roxy by proxy", as well as the "Piquantique" bootleg also have the accent on B pedal. Even stronger so, because there this also happens in bars 7-8. The corresponding 1984/88 tracks on "The perfect stranger" and "Make a jazz noise here" feature E pedal. So Zappa used the E and B as alternative pedal notes for "Dupree's paradise". They are both present in the "YCDTOSA vol. II" version, but sometimes a low held E dominates and sometimes the repeating B, with the E only being touched upon.
- Bars 20-31: phrase 1 gets repeated three times.
- Bars 32-39: phrase 2, also made up of two sub-phrases. The sub-phrases get both repeated once and only differ by the chord from the 5/8 bar. Other than the keyboard #2 part indicates, the second sub-phrase also gets repeated on album. The 2/4 bars contain a little string of 4 eighth notes: Ab-G-C-Bb. The 5/8 bars contain wide chords of six and five notes: D-G-B-D-C-E and Eb-G-Bb-C-F. Zappa's fondness of rhythmic variety in this case gets mostly achieved by the changing meters of the main theme: 4/4, 2/4, 6/8, 4/4, 2/4, 6/8, 2/4, 5/8 and 3/4.
- Bars 40-47: repetition of phrase 2.





Dupree's paradise, themes 2-3. Original score, adapted to the 1974 version by KS.

- Bars 48-61: phrase 3. A through-composed block, again using a different meter: 3/4. Here it's multiscale. The keyboard #2 chords don't appear on album at all. If they would have been included you're getting the next on-line midi file instead of the last one. For phrase 2 it hardly makes a difference, because the keyboard part plays the same notes as on album, but for phrase 3 the climate changes. The prescribed chords are combinations of six or seven notes, not necessarily the same as the other parts use. Thus together with the notes on album, it's denser and there's much more dissonance going on.

Cadenza:

- Bars 62-63: end of the main theme, indicated as two bars for an improvised cadenza. On album the song moves over to a couple of solos, taking up the larger part of the duration of this song.

8:24-9:45: Block V, Flute solo.

The vamp for the flute solo by Napoleon Murphy Brock is in an odd meter, 10/16, subdivided as 4+3+3. Regarding the scales it's an alternation between four bars in B Dorian and four bars in A Dorian, sort of a transposition of the vamp, a second lower. Both the meter and this change of scales are unusual as it comes to solo sections.



Dupree's paradise, flute solo opening bars. Transcription: KS (update summer 2014, deposited at the I-depot, The Hague).

9:45-11:23: Block VI, Bass-drum solo.

11:23-14:29: Block VII, Keyboard solo.

The vamp for the flute solo returns for the keyboard solo in a different shape. The bass figure goes different, but the meter is 10/16 as above, now subdivided by the drummer as 3+3+4. The alternation of the two Dorian scales also returns. George Duke starts the solo with a beautiful melancholic melody. In bar 5 he first turns to step VII of B Dorian, but soon switches to A Dorian.



Dupree's paradise, keyboard solo opening bars. Transcription: KS (update summer 2014, deposited at the I-depot, The Hague).

14:30-19:18: Block VIII, Drum solo.

19:18-23:59: Block IX, Percussion-drums-synthesizer collage.

A collage of percussion, drums and synthesizer sounds, ending with the bass playing the Louie Louie progression. It's a progression Zappa first covered on "Uncle Meat", since then returning to it every now and then. There's no reprise of the theme, as there is one on the 1973 and 1984 executions.

Other examples from YCDTOSA Vol. II and A Token of his extreme

- "YCDTOSA Vol. II" and "A Token of his extreme" are live registrations without the intention of releasing much previously unreleased music. Many titles are coming by in this study in other versions from other CDs. The following four examples are the versions from these two specific issues, presented elsewhere in this study:
- The concert opener on "YCDTOSA Vol. II", "Tush-tush-tush", is included in the Joe's garage section.
- The "YCDTOSA Vol. II" version of "Inca roads" contains more of the guitar solo that was used for "One size fits all". A transcribed example is included in the corresponding One size fits all section.
- The Uncle meat section contains the opening of the 1974 version of "Dog breath", transcribed from the "Dub room special" DVD (the same track as on the "A token of his extreme" CD/DVD).
- The previous Roxy and elsewhere section contains three examples from different executions of "Village of the sun", among them the opening from the "YCDTOSA Vol. II" version.
- Of the previously unreleased material on "YCDTOSA Vol. II", "T'Mershi Duween" is coming by in this study in a version from 1991. This one got released by the ZFT on their "Everything is healing nicely" CD.

ONE SIZE FITS ALL: THROUGH-COMPOSED MELODIES AND SONG STRUCTURES

With these band members, the third line up of The Mothers of Invention, the next 1975 albums "One size fits all" and "Bongo Fury" were recorded, while more live recordings with this band appeared in 1988 as "You can't do that on stage anymore, vol. II". When after the 1975 tour most band members decided to go on with their own career, Zappa stopped using the name Mothers of Invention and went on just as Zappa on the next "Zoot Allures" album.

1. Inca roads





Inca roads, opening theme. Transcription: KS and others.

Note: the basic material of the theme is present in Wolfgang Ludwig's study and some midi files on the net. The interrupting bars and the little syncopes in the melody are specifically transcribed by me (3rd printed edition, 2007).

"One size fits all" contains several melodies that are through-composed, like the themes from "Inca roads", "Sofa", "Florentine pogen" and "Evelyn". The term stands for (sections from) pieces that contain an ongoing melodic line instead of repeating themes. The fluid melody of "Inca roads" gets broken sharp and abrupt once, namely at the section between 0:57 and 1:10 (included below). It's probably one of these interruptions that made George Duke complain to Zappa in a Frank Scheffer documentary (see also the What's next section) saying "This is too beautiful, you can't mess it up". But then Frank would simply reply "Yeah, but it needs to be messed up" (on-line an image with the subtitles in Dutch beneath is shown). The interrupting bars are indeed weird. Their only purpose is to break the melody completely and cause confusion. On the other hand, when you've listened to "Inca roads" often, you get thus used to their presence that removing them would be strange as well. "Inca roads" begins with a vamp of two bars. These two bars are minor variations upon each other. George Duke plays a synthesizer solo over the vamp. The transcription begins at the point where the main theme gets sung. Here the key is vacillating between C major and C Lydian via the keyboard harmony chords you can hear in the background, like at points:

0:38 D.

0:41 F.

0:42 C-D.

0:45 F#m-5.

0:52 Fsus4.

The 1988 execution has this similarly, like an F# for the bass at 0:30 and an F for the melody at 0:41. In 2012 another guitar book from the Hal Leonard series appeared, this one by Addi Booth with all of "One size fits all". It has the guitar chords much more detailed in it than as I just indicated, about a chord per note. I don't know if he actually managed to hear these chords from record or whether it's a proposed arrangement. It sounds okay if you play it in that manner and then the melody would tend more towards being polyscale. Bars 13-19 above contain the interruption (Addi Booth has it written out in details with all off the spoken words in it). Bars 20-22 include two variations upon the opening bar, the first simply by being in 5/4, the second is an acceleration via triplets. It's the point from whereupon the melody starts to modulate more clearly: the sung F from bar 10 becomes F# in bar 22.



Inca roads, YCDTOSA II, 3:51-4:34. Transcription: KS (bars 3-18)/Addi Booth (bars 1-2; 19-22). 4th printed edition, 2012.

[&]quot;Inca roads" is one of a series of Zappa songs that's made up of recordings from different live recordings

plus studio overdubs, so that he could combine the parts that he thought had worked out the best. Usually you get the information about how it's done via the album liner notes or what's been said about it in interviews. Here you have a unique situation in which you can check everything out yourself. In the eighties Zappa released the two live recordings, that formed the basis of "Inca roads", integrally and unaltered. The first one is "Inca roads" from the "Dub room special", with the performance the band did before a studio audience at KCET TV, good for the basic tracks. The other version is "Inca roads" from "YCDTOSA Vol. II/The Helsinki tapes", that delivered the guitar solo. Comparing these with the "One size fits all" version then makes it possible to identify the overdubbed parts as the remaining source. Zappa must have been pleased with the result and, it must be said, the final "One size fits all" version surpasses the two live recordings. He kept playing "Inca roads", but didn't include a later version in his live compilations until 1991. An earlier version from 1972 however appeared on "The lost episodes" from 1995. This one begins with what's a faster variation upon the opening theme on "Inca roads". Speaking for myself I got so used to hearing this part as a variation that it sounds illogic to open "Inca roads" in this manner. The reality is that it's the other way round. "The lost episodes" begins with the theme in its first form and the opening on "Inca roads" is in fact a slower variation, added later on. From the later "Inca roads" performances, a couple of solos were taken out and released as individual pieces, most notably on "Shut up 'n' play yer guitar". The "Inca roads" solo is a I-II alternation in C Lydian. Bootleg collectors, and sometimes interview information, make it possible to positively identify other C Lydian solos as stemming from "Inca roads". Zappa shortened the original Helsinki solo for "One size fits all" (OSFA below) on three spots, that can be located in the above mentioned guitar book as follows (YCDTOSA sections as mentioned in the globalia.net/donlope/fz site):

- Page 18, transition from bar 5 to 6 (OSFA point 3:51): YCDTOSA 3:55 through 4:27 are edited out.
- Transition from page 18 to 19 (OSFA point 4:14): YCDTOSA 4:50 through 5:25 are edited out.
- Page 20, bar 4, transition from beat 2 to 3 (OSFA point 4:36, end of the solo): YCDTOSA 5:47 through 6:05 are edited out.

The second example above represents the YCDTOSA solo from 3:51-4:34, thus some bars from "One size fits all" plus the first block that got edited out. The two cutting points are indicated with an arrow. Another thing you can hear is that Zappa can change the sound of the guitar and make notes from guitar effects vanish. The YCDTOSA sound is rawer and contains more additional sounds from guitar effects, whereas the OSFA sound is brighter. You can see this for instance in a simple form by comparing bar 22 in the transcription above and the one by Addi Booth: the lower D and A are missing, not because Addi didn't notate them, but because Zappa made them largely disappear.

The general outlines of "Inca roads" can be readily followed, using the Hal Leonard guitar book: 0:00 Main theme as described above. The vamp only uses the note combination C, D and G. So the other four notes of a diatonic scale can determine what scale is used. By altering notes Zappa lets the melody and harmony vary between C major, C Lydian and C minor.

- 1:44 Motif I, a string of mostly 16th notes, played four times. Both F# and a lower E are used as pedal notes. The F# indicates F# Locrian, but on E it's E Minor, a more normal scale.
- 2:00 Guitar solo (see above), beginning as a I-IV alternation in A Dorian, but soon turning to a I-II alternation in C Lydian.
- 4:37 Motif II. This sung motif stems the opening of Holiday in Berlin solo from 1970, being a variation upon it. See the Bootleg and archive recordings section from this study. 5:09 Motif I returns.
- 5:27 Variation upon sections from the main theme. So far "Inca roads" has been in 4/4. Here the meters start to vary.
- 5:41 Instrumental variations upon the main theme. It's at this point where the earlier version on the "Lost episodes" CD starts. Thus historically this is the original statement of the theme and the opening on "One size fits all" was added to it later on. It looks like this also applies to the opening vamp. The "Roxy by proxy" version does not yet include this vamp (see the Roxy section). Rip Rense cites Ian Underwood for saying that this earlier version should not be seen as a merely a prototype for just learning this piece ("The

lost episodes" booklet). It just got bigger and got played in different manners during time. The "Roxy by proxy" version confirms this. According to Rip Rense many Zappa songs with lyrics can be played instrumentally just as well. The 1972 and 1975 versions of "Inca roads" illustrate this. See also the "Let's make the water turn black" paragraph from the Make a jazz noise here section for more examples. 6:05 Keyboard interlude in 7/16 with a through-composed melody. This melody gets led through a number of Lydian and Dorian keys, changing per bar.

- 6:23 Motif III, a descending sequence in 6/8, leading to a repeated figure in Bb Lydian.
- 6:34 Keyboard solo in 7/16, alternating Ab Lydian and G Dorian.
- 7:52 Variation upon the previous keyboard interlude. The melody is mostly the same, but the meter and rhythm are different.
- 8:08 Main theme variations once more, followed by an outro.
- 8:44 End.



Inca roads, section. Transcription from the CD by KS, where most material could be taken over from the scores below.



Inca roads, section. One size fits all guitar book, page 25 (transcr. by Addi Booth).



Inca roads, section. Excerpt from page 15 from the arrangement for orchestra by Tom Trapp (top staves, see the on-line version of this study for the complete page).

This last example is the opening from what's called the interlude in the One size fits all songbook. I've

included a transcription from the CD, the songbook score and an orchestral arrangement, sent to me by Tom Trapp. Tom works as an arranger/composer, originally in New York and today in Amsterdam, Holland. His site offers a number of such arrangements, among others this orchestral version of the complete "Inca roads" score (apart from the improvised solos). What you can see happening here is the return of several phrases from the main theme with a different rhythm. Instead of a steady 4/4 with a vamp, it contains almost constantly changing meters. Because of the absence of lyrics at this point the music can be played much faster as at the beginning. This section is diatonic but, other as at the beginning, it can't be attributed to scales. The bass is either playing along with the melody or playing counterpoint figures. It doesn't confirm a tonic.

As about always there are also on this occasion some minor differences between the score and the album execution:

- The 8/16 bar lasts 9/16 on the album with the second C being extended from a 16th note to an eighth note. Because both Addi and Tom are using 8/16, I think this was a change done on the spot.
- During beat three of the 5/4 bar you can hear the marimba hitting an Ab while the keyboards play a G. Here Addi prescribes this G, where Tom is notating an Ab. Since you can hear both on the album, it remains undecided which notes Zappa put on paper himself.
- The rhythm of beat four of the 4/4 bar goes different on the album and the scores by Addi and the one by Tom. Again it remains undecided how Zappa then must have notated this. The triplet with 32nd notes by Addi looks almost undoable to me in this tempo. Like above I'm not really hearing the chords he's indicating. Possibly it's a suggested harmonization, but during the 15/16 bar his chords can be partly recognized in the bass figures. This 15/16 bar is played as three times 5/16. The guitar book has 4+4+4+3 as subdivision. I guess that's something his notation program did, that he forgot, or didn't find important to adjust.

2. Can't afford no shoes

On pages 170-1 of his study W. Ludwig is presenting three examples from "Can't afford no shoes", while page 220 offers an overview of its structure (see the references for the Ludwig study). In this case Zappa is using his vocalists not only for singing in parallel octaves, but also for speech-wise commenting upon what's being said. During the opening it begins with singing "have you heard the news", immediately followed by the spoken text (or speech-wise singing of) "news, what news?" as if a dialogue is going on. Parallel octaves are applied quite a lot on "One size fits all", making the sound voluptuous. This specifically goes for the "Florentine pogen" melody.

The songs begins with a riff in B Mixolydian, using the progression A-B-D. The D chord is evasive with the D becoming natural. Next the verse starts in E Mixolydian. Addi uses this as the central key, notating the entire song as in E major (a convention in the Hal Leonard series).





Can't afford no shoes, opening. Transcription: KS/Addi Booth.

Staff one during bars 1-3 and staff 2 during bars 4-7 represents a rhythm guitar with scratch-like notes, a bit irregular with the B best audible and further not precisely notated.

As noted by Ludwig (and indicated in the Guitar book) the chorus is forming a sequence with the following chords:

- 1a) F-C-G ("Hey lawdy mama ..."): F Lydian, I-V-II.
- 1b) Bb-Dm-C ("Maybe there's a ..."): Bb Lydian, I-III-II.
- 2a) A-E-B ("Hey anybody ..."): A Lydian, I-V-II.
- 2b) D-F#m-E ("If you're really ..."): D Lydian, I-III-II.
- 3a) C#-G#-D# ("Hey everybody ..."): C# (Db) Lydian, I-V-II.
- 3b) F#-A#m-G# ("Chump Hare Rama ..."): F# (Gb) Lydian, I-III-II.

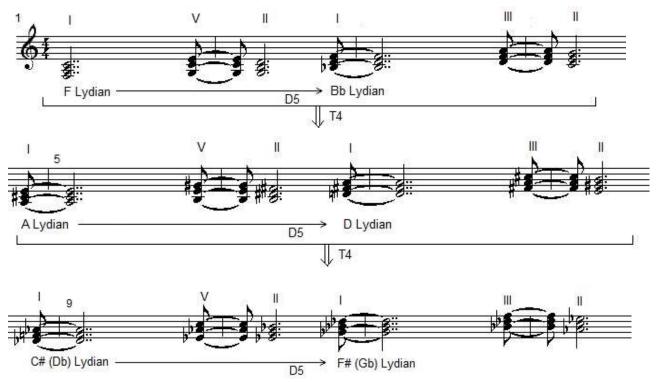
Followed by D#-B-G ("Recession, depression"). When you relate them to scales and indicate them as Roman numbers too, the pattern of the sequence becomes clear:

- The scale is always Lydian.
- 1), 2) and 3) are transpositions, going up with a major third. You may also notice that their rhythm goes the same.
- a) uses I-V-II.
- b) uses I-III-II with the tonic going up with a fourth.

The effect of the whole would be that the music is getting higher and higher, as shown in the pattern diagram. This effect gets neutralized in the actual playing on album by using inversions too. The bass C# from bar 9 for instance doesn't go up to an F# on album, but down to an F#. Sequences happen a lot in Zappa's music. See the Just another band from L.A. section for an overview. In this specific shape it's a one-time only occurrence, as usual in Zappa's output.

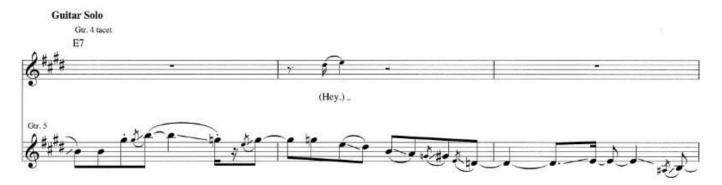


Can't afford no shoes, 0:39-0:53. Transcription: KS/Addi Booth.



Harmonic pattern of the chorus. D5: a tone distance of five minor seconds (a fourth). T4: a transposition with four minor seconds (major third).

It's almost like following a mathematic formula, but is has no relationship with standard harmony patterns. Zappa never confirms a tonic, but lets the keys jump from one into the other overnight. Another thing is that a) is the II-V-I progression backwards, a progression that he claims to have loathed (see the "America drinks and goes home" example from the Absolutely free section).



Can't afford no shoes, opening of the guitar solo. One size fits all Guitar book (page 46).

During his guitar solo from this song Zappa is using E Dorian and E Mixolydian next to each other by switching between a G natural and a G sharp. This is a recurrent feature in his music (see the Guitar section for a series of examples). The bass is giving an E pedal and the harmonies in the background are mostly the E7 and E chords.

3. Sofa no. 1

The distinction between "Sofa no. 1" and "Sofa no. 2" on "One size fits all" lies in the addition of vocals to the tracks during "Sofa no. 2", while "Sofa no. 1" is all instrumental. Both versions are also present on a couple of live CDs. On "Zappa in New York" from 1978 this song returns in the shape of "Sofa no. 1". A smaller example is included in the Weasels ripped my flesh section from this study. See also track no. 9 below for an example from the vocal version. The 1971 vocal version is the second larger "Sofa" example, that you can find in this study (see the Playground psychotics section). To the left an outtake from the album's backside cover art by Cal Schenkel, featuring Zodiac figures mingled with all kinds of graphs.

Zappa's own scores use capital letters to indicate the sections. These can also be found in the One size fits all guitar book with "Sofa no. 1" knowing five sections:

- 0:00 A, bars 1-22, the main theme. This section corresponds with bars 8-29 from the "Sofa no. 2" example from my Playground psychotics section (transcribed from "YCDTOSA Vol. I").
- 0:34 B, bars 23-36.
- 0:56 C, bars 37-64, variation upon the main theme.
- 1:39 D, bars 65-79. This section is included below at track 9, the version with lyrics.
- 2:01 E, bars 80-103.
- 2:38 End.

They return in "Sofa no. 2", being labeled as follows in the Guitar book (the number of bars is identical):

- 0:00 A, Verse, "I am the heaven ..."
- 0:34 B, Pre-chorus, "Ich bin deine Ritze ..."
- 0:56 C, Chorus, "(I am the) clouds, I am embroidered ..."
- 1:39 D, Bridge, "Ich bin alle Tagen ..."
- 2:01 E, Outro, "(Ich bin) hier und du bist mein Sofa ..."

- 2:38 This track ends with a pause.
- 2:47 End on the CD.



Sofa #1 (1975), opening of theme B (the meter is 3/4). Transcription: Addi Booth.

This example from the One size fits all guitar book contains the opening of theme B, in the shape of the "Sofa no. 1" version. Its basic chord progression is F-Em-Dm-G. These are steps from the C major key of theme A, rather than a modulation. Theme D, on the other hand, knows a steady G pedal by the bass. This can be interpreted as a modulation to G Mixolydian, though one might argue it's still step V of C major. The song ends in an evasive manner with a sustained A chord. This is something Zappa liked to do, also commented upon at "Outrage at Valdez" in the documentaries section of this study.

4. Po-jama people

The subject of "Po-jama people" already existed at least a year earlier and Zappa used it for his Helsinki concerts from 1973, the ones you can find on "Road tapes, venue #2". Two examples of this "Pojama prelude" are included in the Roxy and elsewhere section. The music at that point is totally different from what "Po-jama people" came to be on "One size fits all". While at first a vamp, that got improvised along, the song is now a larger regular composition. Still improvisation remains an important ingredient with especially George Duke playing around the chord progression all through the song.

Apart from the intro all of this piece is played over a I-IV alternation in D Dorian: the verse, the chorus and a lengthy guitar solo. That is the Dorian sonority dominates with the F being natural. When you compare the above example with the transcription by Addi Booth in the One size fits all guitar book, you have to take the following into account:

- It's a convention of the Hal Leonard series to always notate pieces as if in major or minor. In this case D major, with the intention of Addi to see it as Mixolydian.
- All parts are notated in the guitar manner (also the vocal line), thus an octave higher than the actual sounding pitch.
- The bass part isn't included but can to a degree be derived from the root notes from the indicated chords. In the guitar book you can see that the bars with the I-chord sometimes get indicated as D7#9 and sometimes as Dm7. It's difficult to exactly hear the difference, but Addi may very well be right. He's certainly right about the F being sharp in beat three, staff five. For this reason Addi chose for Mixolydian instead of Dorian. So one might also interpret the song as a mix of Dorian and Mixolydian, a common practice in Zappa's music.



Po-jama people, 0:39-0:48. Transcription: KS, with elements by Addi Booth (see below).



Po-jama people, bars 1-2 from above as included in the One size fits all guitar book.

5. Florentine pogen

From the "One size fits all" album I would like to give the lengthy theme of "Florentine pogen" as another example of a melodic line set throughout. Most pop music as well as classical music has a thematic structure, where the music can be divided into two or more themes, that alternate each other, in pop music normally without the elaborate variations of the themes, which can be found in classical music. A clear example of the regular pop music two theme structure is "Camarillo Brillo" from "Overnite sensation":

- 0:00 Instrumental intro
- 0:18 Theme A ("She had that camarillo brillo...")
- 1:05 Theme B ("She had a snake for a pet...")
- 1:25 Theme A
- 2:12 Theme B
- 2:33 Theme A (Fading out instrumentally)

Zappa is also using other forms like variation forms where one motif or a melody is played several times with variations and compositions with a continuing melody, that have no clear division into separate themes. In early classical music pieces with continuing melodies were sometimes called fantasies or toccatas. In the 19th century, when this method of composing became applied in songs and opera's, the words "through-composed" or "set throughout" were introduced to describe it. The "Uncle meat main title" theme from above is an example of a melody set throughout. It is true that this melody can be divided into sections, but the melody as a whole is not formed by alternations of these sections. On the "Uncle Meat" album, as well as on the chamber orchestra version on "The yellow shark", the theme is played several times with slight variations, ending with a coda, in this way becoming a variation piece.



Florentine Pogen theme, main melody (most parallels left out). Transcription: KS (1st printed edition, 2000).

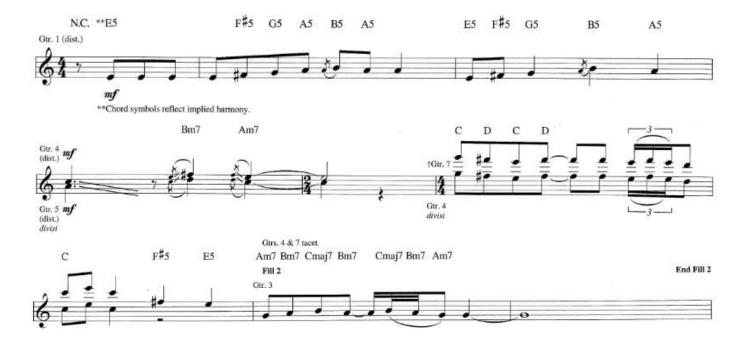
(Thanks to Justin Birchell for attending me to that it's better to notate the first three notes as pick up notes instead of only the first one, as I first had).

The theme from "Florentine Pogen" is by itself just as the "Uncle meat main title" theme through-composed. "Florentine Pogen" as a whole is a variation piece, with the theme repeated several times with lyrics and many alternative bars. The descant melody of the main theme as played at the opening is given above in its whole length. A bass guitar and a synthesizer bass are playing parallel with it at varying interval distances. When the structure of such a melody cannot be described as something like A-B-A, there have to be other structure building elements, if the piece sounds coherent. The example above is the theme in the shape of its appearance during the instrumental opening. In this case such elements are:

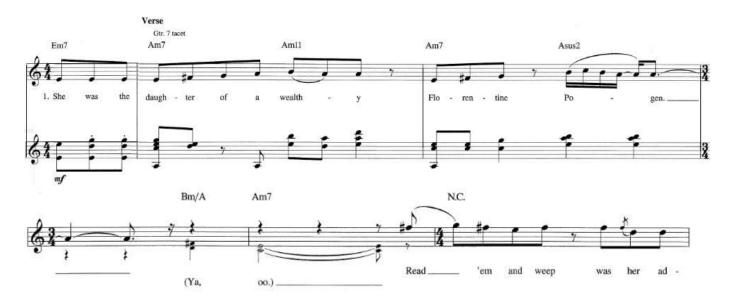
- The key is E Minor (Aeolian) during the first half of the theme. In the second half changes to related keys are made.
- The returning use of strings of eighth notes.
- The frequent accenting of the E note.
- The instruments and vocalists are playing and singing the whole melody either unisono or in parallels.

Very intentionally this pattern is broken in the two bars with sixteenth notes. The first one has a figure using notes of what you might call C# Lydian. The figure is repeated a second lower in the second bar using notes of B Lydian. These two figures have nothing in common with the other parts of the melody. Zappa loved to add such pattern breaking or opposing figures to his melodies.

The example above is one of the oldest from this study. In 2011 the mentioned Guitar book appeared with more of the parallels included in it and some more harmony notes:



Florentine Pogen, Guitar book sample, lead melody and all involved harmony notes (bars 1-8).



Florentine Pogen, idem, opening of the verse.

Addi notates the first two bars as a series of (implied) parallel fifths. It indeed does sound like that, with an parallel octave in it as well. The verse starts with repeating the instrumental intro, but harmonized differently, as you can see in the notated chords. There's also a key change happening. During the intro both the pick-up bar and the first E of bar 1 have a bass E, clearly setting the key to E minor. Also the pick-up bar of the verse has a bass E, but for the first (sung) E of the next bar the bass moves over to an A (the Guitar book doesn't explicitly specify bass notes, but you can verify this on the CD). Combined with the Am7 chord, this is causing a modulation to A Dorian (by switching the pedal note). Brett Clement points to that in his response to me, but that's not good enough for me to see the intro as A Dorian too.

You can't expect people to experience the intro as if in A Dorian when it strongly starts on E. The different meters Addi is using are in my opinion notational differences only.

6. Evelyn

The melody from "Evelyn" is a speech-influenced example of a through-composed melody. It follows the syllables of the words, here all strictly divided over eighth notes. The accent syllables of the words determine the here notated metres, except for the instrumental bars 9 and 10, which are regular 4/4. The melody is about always using the smaller intervals. The majority are seconds movements. You might call "Evelyn" a poem set to music, engendering a belletristic and eloquent application of English, which can stultify non-native English babblers like myself.

Zappa used melodies, which are composed throughout, most often for his instrumental music, for instance the jazz albums from 1972 and the London Symphony Orchestra recordings. We'll get to some more examples taken from instrumental pieces in the following sections.







Evelyn, a modified dog, opening. Transcription: KS (melody and harmony)/Wolfgang Ludwig (rhythm). Ludwig part published in 1992; KS: update 2005, 3rd printed edition 2007. Notes:

- The 8va b. in staff 1 stems from the fact I notated this line an octave to high at first.
- There's some rubato in the tempo. Addi Booth notates the rhythm somewhat differently in the One size fits all Guitar book.

7. San Ber'dino

"San Ber'dino" is an example of a song with an unconventional structure. It has one short central theme, that gets varied upon, various side themes and passages, as well as solo bars.

Block I

- 0:00 Instrumental opening #1 in country and western style.
- 0:08 Main theme, "She lives in a ...", with as basic characteristic a melody going up and down again.
- 0:14 Instrumental passage #1, following the idea of a melody going up and down again, now with larger intervals.
- 0:18 Main theme, "His name is ...".
- 0:22 Instrumental passage #1.
- 0:27 Instrumental passage #2.
- 0:34 Main theme, "She's in love ..." plus a vocal variation.
- 0:44 Instrumental passage #3. This is a pattern breaking riff with biting quintuplets.

Block II, mostly following block I

- 0:50 Instrumental opening #2, used during the song to reintroduce the main theme.
- 0:59 Main theme, "He got stubbering ...".
- 1:03 Instrumental passage #1.
- 1:07 Main theme, "They gave him ...".
- 1:12 Instrumental passage #1.
- 1:16 Instrumental passage #2.
- 1:24 Main theme, "Well there's 44 ..." plus a vocal variation. Here the transcribed section below is taking off (bars 1-4). The key is A Dorian for most of the bars till bar 12.
- 1:33 Instrumental passage #3 (bars 5-7).

Block III

- 1:39 Instrumental opening #2 (bars 8-11).
- 1:48 Sequence of vocal variations upon the main theme (bars 12-19).
- 2:05 Side theme #1, "They don't care". Modulation from E Mixolydian (bars 16-19) to F# Minor (Aeolian) by moving the bass pedal note up a second (bars 20-22). Thus far the transcription.
- 2:14 Instrumental passage #4 followed by soloing with the bass continuing the riff of the first bar of this passage.
- 2:55 Sequence of vocal variations upon the main theme.
- 3:12 Side theme #2, "Real good deal-o".

Block IV

- 3:25 Instrumental opening #2.
- 3:33 Outro with Johnny Guitar Watson improvising lyrics and the others improvising over a bass variation upon the main theme.
- 5:42 Closing bars.
- 5:56 End of the song.





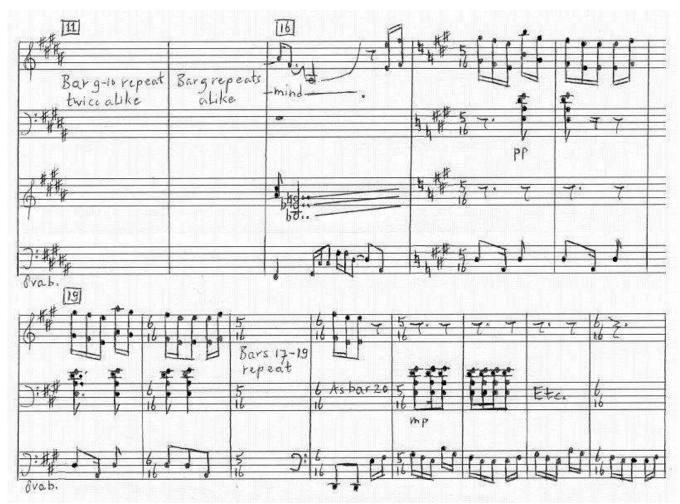
San Ber'dino, section. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

8. Andy

The construction of "Andy" gets dealt with in the Wolfgang Ludwig study from 1992, pages 97-100. He also transcribed all the lead melodies (pages 240-244). He subdivides "Andy" into the themes as given below, with details based upon the Addi Booth guitar book added to it by me:

- 0:00. Theme A in 4/4. Bars 1-4 start with the bass A going up and down again with the chord progression Asus4 Am7#5. Next these bars turn into a I-II progression in A Lydian. A little repeated melody gets played over it. Wolfgang notates the first beat of it with a quintuplet, but I think the Addi Booth version with 2/16 plus a triplet is more accurate.
- 0:34. Theme B. First theme with lyrics, sung flatly. The meters are varying with strings of 16th notes and an occasional 8th note. This sung theme with odd meters gets interrupted a couple of times with a bar with a chord in more even meters. Wolfgang is using other meters than Addi. Mostly they are notational differences, but sometimes there's a little real difference. Other than Wolfgang, Addi lets the first two words, "is there", start in the last 4/4 bar of theme A, which is correct. This is as far as I have checked differences. This block you can either identify as multiscale or chromatic.
- 0:57. Theme C in 6/8 in basically E, but with altered notes as well.
- 1:16. Theme A returns, now with some lyrics ("something").
- 1:34. Theme D. Here the example below starts. This theme D can be seen as a character variation upon theme A. First you have the plain A chord with bass pedal A (bars 1-4 in the example below). The bass and drum are together giving the specific partially syncopic rhythmic figures as in theme A. In bars 5-8 the I-II alternation returns. Specifically interesting sounds bar 6 because it's mingling chords. The main guitar chord is B (staff 2). The bass is first giving B pedal, but soon returns to A (staff 3). The piano plays a chord progression over it: E-B-A-E-B-A-B-(A) (staff 1). It's only played exactly this way on "One size fits all". On the other two official versions it's more just the B chord ("Buffalo") and a variation upon it ("The best band you never heard in your life").
- 1:51. Theme E in 4/4 ("show me a sign" etc.). It's sung over a C#m7 F# alternation in C# Dorian.
- 2:08. Theme F. A string of 16th notes over a D pedal. Here the difference between Wolfgang and Addi is merely notational (5/16 + 5/16 becomes 10/16 in the guitar book and 5/16 + 6/16 becomes 11/16).
- 2:19. Theme A returns once more. At this point the example above has ended.
- 2:31. Theme D. From point 2:39 onwards a slower organ melody is played over it. At 3:23 it evolves into a little guitar solo.
- 3:48. Theme F returns, now with lyrics.
- 4:02. Theme A returns once more.
- 4:11. Theme D with no specific features this time. Just A pedal with the rhythmic figures.
- 4:19. Theme E, variation 1 (different accompaniment and guitar riffs).
- 4:51. Theme E, variation 2 ("Oh Andy..., Andy...").
- 5:08. Theme G. The lyrics continue ad lib. An outro riff enters that gets repeated till the end with a second guitar solo played over it. The outro is in F# minor or Dorian (the D/D# isn't used to determine which one it is).
- 6:03. End.





Andy, section. Transcription: Addi Booth/Wolfgang Ludwig, with additions by KS. 4th printed edition, 2012.

Form teil	Taktfolge	Motive ³	Tempo
Δ	4/4, 4/4, 4/4, 4/4, 4/4, 4/4, 4/4, 4/4 4/4, 4/4,		 J == 114
В	5/16, 5/16, 5/16, 5/16 2/4, 8/16, 4/4, 2/4, 2/4, 2/4 4/4, 12/16, 2/4		II ∫≈ 540 -570
2.	⁷ /8, ⁹ /8, ¹¹ /8; über die ⁹ /8- und ¹¹ /8- Takte rezitiert der Sänger metrisch frei die beiden Silben "/s there"		
c -	6/8, 6/8, 6/8, 6/8, 6/8, 6/8, 6/8		
Α'	4/4 4/4, 4/4, 4/4, 4/4, 4/4, 4/4, 4/4, 4		Ī
D E	4/4, 4/4, 4/4, 4/4, 4/4, 4/4, 4/4 4/4, 4/4,		
F.	5/16, 5/16, 5/16, 5/16 (4 x)	# TAIN AIM	П
Y-1-11-11-11-11-11-11-11-11-11-11-11-11-	4/4, 4/4		I
Α''	4/4, 4/4, 4/4, 4/4		
D'	4/4, 4/4, 4/4, 4/4 4/4, 4/4, 4/4, 4/4 (6 x) 4/4, 4/4, 4/4, 4/4 (2 x)	Gitarrenimprovisation	
F'	5/16, 5/16, 5/16, 5/16 (4 x)		II
Δ''	4/4, 4/4, 4/4, 4/4	The state of the s	1
D	4/4, 4/4, 4/4, 4/4	2.75	
E'	4/4, 4/4, 4/4, 4/4 (4 x) .		
E''	4/4, 4/4, 4/4, 4/4, 4/4, 4/4, 4/4, 4/4	Ac#	
G	4/4, 4/4 (4 x) . 4/4, 4/4 (8 x) .	Gitarrenimprovisation	

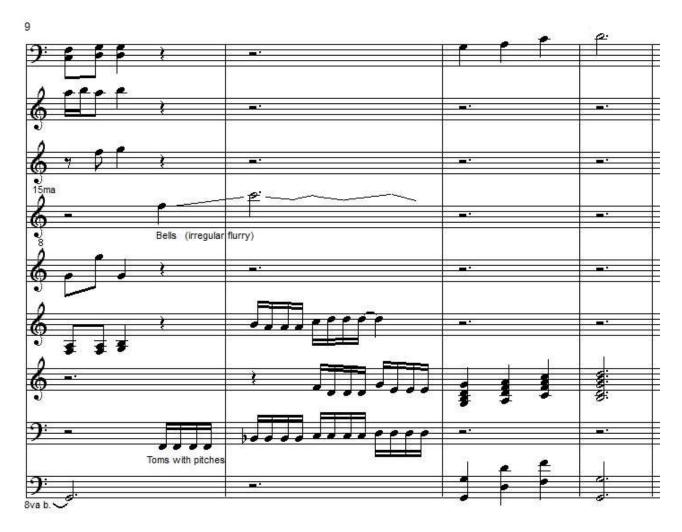
³ Notiert wurden jeweils die markantesten Motive, im C-Teil der Gitarrenriff

Overview of the thematic structure and the use of meters during "Andy". Ludwig study, page 232.

9. Sofa no. 2

As mentioned above "Sofa" returns at the end of "One size fits all" with lyrics. This is the way Zappa originally composed "Sofa" for his fall tour from 1971. It explains why "Sofa no. 2 (1971)" has its lyrics in German. See the Playground psychotics section at the Once upon a time paragraph, for more about this topic. The sofa, there depicted as floating through the universe, is also prominently present on the album cover of "One size fits all" (outtake to the left). The text "Divan, divan, weisst du wie ich bin" is German for "Divan, divan, do you know who I am". The sung melody from "Sofa no. 2 (1984)", being played backwards, can be heard on "Ya Hozna" from the later "Them or us" album. A couple of bars are included in this study.





Sofa #2 (1975), section. Transcription: Addi Booth with additions by KS.

While most of "Sofa" is homophonic in standard 3/4, the section above contains three-part polyphonic movements:

- First part: staff 1, sung part with "Ich bin alle Tagen und Nächte" (German for "I'm all days and nights").
- Second part: staves 2-3.
- Third part: staves 5-6.

Staves 4 and 7 are the bass with a G pedal, supported by a marimba, setting the key to G Mixolydian. Part 1 lasts three bars, while parts two and three last four bars. So you can get any harmonic combination, accentuated by the fact that both parts two and three already contain complementary harmonies by themselves. While you might say that bar 1 starts as G7add4 on beat 1, the other notes get involved soon. Addi simply indicates G13, the total scale as harmony. With the "Ich bin alle Tagen und Nächte" entering the picture you're getting at what I'm calling a harmonic field in the Zoot allures section. Bars 11-12 are the beginning of the outro, continuing homophonically as how the song started. You can compare the polyphonic set-up of this example with the "Sofa no. 1 (1976)" sample from the Weasels ripped my flesh section from this study.

SONG STRUCTURES (BRIEF RÉSUMÉ OF EXAMPLES)

Comments on the various ways in which Zappa gave structure to his songs turn up spread out over this study. I'm ending this section with an overview of various examples dealing with structures and the forms of variations you can encounter (not intended to cover all I've said on this topic). It mentions section, songtitle and very briefly summarizes the subject:

- Zappa's teens: "Sleeping in a jar" (central theme, intermezzo, outro).
- Movie scores: "Holiday in Berlin" (changing the structure over time).
- Idem: "Run home, slow main title" (varying a theme).
- Pal records: "Why don'tcha do me right" (varying a theme over time).
- Absolutely free: "Plastic people" (main theme, intermediary theme, interlude).
- Idem: "Brown shoes don't make it" (scheme of the general set-up).
- We're only in it for the money: "What's the ugliest part of your body" (collage structure).
- Lumpy gravy: "Foamy soaky" (motifs).
- Cruising with Ruben and the jets: "How could I be such a fool" (character variations).
- Uncle meat: "King Kong" (sequences and variations of motifs).
- Idem: "Dog breath variations" (varying a composition over time).
- Idem: "Uncle rhebus" (medley via playing two songs simultaneously).
- Hot rats: "Peaches on regalia" and "Little umbrellas" (classicism).
- Burnt weeny sandwich: "Kung Fu" (deliberate irregularity).
- Idem: "My guitar wants to kill your mama" (verse-chorus/refrain with a bridge of three sections).
- Weasels ripped my flesh: "What will this evening bring me this morning" (canon).
- Chunga's revenge: "Tell me you love me" (multi-theme structure).
- Idem: "Rudy wants to buy yez a drink" (three themes with an interlude).
- Quaudiophiliac: "Twinkle tits" (scheme of the general structure).
- Fillmore east: "Latex solar beef" (two appearances of the main theme).
- Idem: "Bwana dick" (multi-theme in combination with tempo changes).
- 200 Motels: "Magdelena" (three themes with tempo changes).
- Waka/Jawaka: "It just might be a one shot deal" (three themes, two intermezzi).
- Imaginary diseases: "The new brown clouds" (diatonic variations with an atonal medley in between).
- Overnite sensation: "Fifty-fifty" (modulation schedule).
- Roxy and elsewhere: "Approximate" (little themes alternating with improvised sections).
- Idem: "The be-bop tango" (three versions).
- One size fits all: "Camarillo brillo" (standard two-theme structure).
- Idem: "Florentine pogen", "Inca roads" and "Evelyn" (through-composed melodies).
- Idem: "San' Berdino" (main theme, side themes, instrumental passages).
- Idem: "Andy" (multi-theme with variations).
- Bongo fury: "Debra Kadebra" (sequence of motifs in varying meters and tempi).
- Idem: "200 years old" (blues scheme).
- Orchestral favorites: "Duke of prunes" (development over time).
- Idem: "She painted up her face" (rondo).
- Idem: "Bogus pump" (variations).
- Idem: "RDNZL" (themes and ways of indicating solos).
- In New York: "The black page" (same complex rhythm for two different melodies).
- Idem: "The purple lagoon/Approximate" (combining compositions).
- Läther: "Bowling on Charen" (combining types of soloing).
- Sheik Yerbouti: "Mo' mama" (stream of motif variations).
- Idem: "Flakes" (riff and themes).
- One shot deal: "Occam's razor"/"On the bus" (effect of xenochrony).
- Tinsel town rebellion: "Easy meat" (building up a song over time).

- Shut up 'n play yer guitar: "Five-five-FIVE" (sequence).
- The LSO: "Mo 'n Herb's vacation" (variations over a long distance).
- Idem: "The girl in the magnesium dress" (use of "digital dust").
- Drowning witch: "Marque-Son's chicken" (riff, themes, sequence).
- Idem: "Naval aviation in art" (sequence).
- The man from Utopia: "The radio is broken" (blocks and intermezzi).
- Idem: "Tink walks amok" (motif variations).
- Idem: "The torture never stops (1980)" (sections and solos).
- Thing-Fish: "Artificial Rhonda" (one theme in a perpetuum mobile).
- Idem: "No not now"/"Won ton on" (effect of backwards playing).
- Mothers of prevention: "Alien orifice" (different harmonizations).
- Guitar: "Sexual harassment in the workplace" (blues scheme some more).
- YCDTOSA: "Honey, don't you want a man like me?" (variations over time).
- Broadway the hard way: "Rhymin' man" (interruptions of a melody).
- Idem: "Any kind of pain" (verse-refrain-bridge).
- Idem: "Jesus thinks you're a jerk" (four blocks and relations between them).
- The best band you never heard in your life: "Zomby woof" (themes, riffs, solo).
- The yellow shark: "Strictly genteel" (classical variation piece).
- Idem: "9/8 Objects" and "T'Mershi Duween" (layers).
- Idem: "This is a test" (variations).
- Idem: "Ruth is sleeping" (interval exercise for seconds).

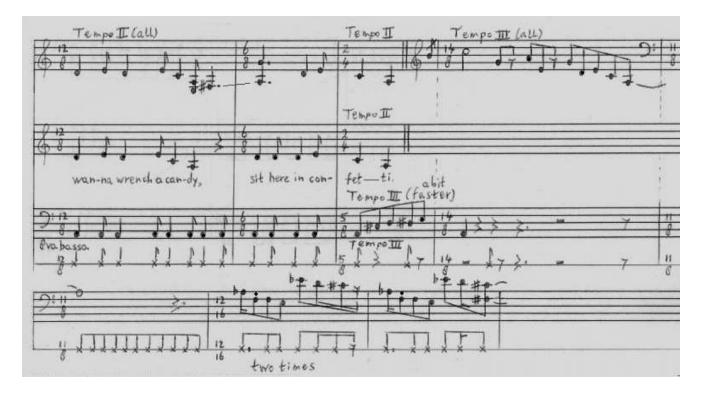
BONGO FURY: WORKING WITH DON VAN VLIET

In 1975 Zappa started working with Don Van Vliet again, his friend from high school days onwards. Don had also been successful in starting a career in music, releasing several albums as "Captain Beefheart". Zappa cooperated with Don on record on two occasions. In 1969 Don sang the lyrics of "Willie the pimp" on Zappa's "Hot Rats" and Zappa produced Beefheart's "Trout mask replica" for his Discreet Records label. Then Don started accusing Zappa of all sort of things in the press and their friendship appeared to have halted. But in 1975 he was without a record contract and returned to Zappa for help, tuning down his hostile tone of the past years. They decided to do a short tour with the Mothers including Beefheart and a deal was made that Beefheart could do a new album for Discreet. It wasn't something that could last because Beefheart was only of limited use for The Mothers, singing the pieces suited for him, but most of the time he sat at the side of the stage making drawings (photo to the right).

From the tour the "Bongo fury" album was done, also including some studio material. Because the tour was short Zappa couldn't have everything developed as thoroughly on the road as he usually did, if he wanted the album to be coherent. For the live albums from the seventies Zappa recorded the tracks mostly at one location, so that the listener could get the idea of being at a specific concert. From "Sheik Yerbouti" (1979) onwards he changed this approach to combining the best tracks from different locations. The "Bongo Fury" live songs stem from the two concerts in Austin, Texas, May 1975. Here he allowed or was forced to allow imperfections as one time too much "heh-heh-heh" on "Advance romance", less sparkling solos and seconds with voids in "Carolina hard core ecstasy". So when he had to laugh during the reciting of the lyrics from "Muffin man", he may have decided he might leave that in just as well. It doesn't do much harm though.

1. Debra kadabra





Debra Kadabra, 0:14 through 0:39. Transcription: KS (2nd printed edition, 2001).

In May 2018 Marcel Chrétien sent me the variant below upon the first bar. So I've been relistening with the following conclusions:

- There are some fluctuations in the way this figure is played. It depends upon what bar you're looking at and how precise you're transcribing it.
- In previous editions I took the first G of the guitar riff as the opening note of a bar, but there's mostly a bass drum beat preceding this note and sometimes a faint A by the bass. When you're listening to the opening from the beginning, it becomes more logical to take this bass drum beat as the downbeat, so I've adapted the notation by moving everything to the right with an eighth note. So Marcel's right about letting the guitar part start after the downbeat and right at the beginning it's more like a 16th note than an eighth note after the downbeat. It starts like below, but later on it becomes more like above.



"Debra kadabra" featuring Beefheart is a song where the melody is made up of several sections with motifs, that can get repeated and varied upon, going from one motif to another, often changing the tempo. The quick movement through various motifs is a way of structuring that Zappa would repeatedly return to. It became dominant in "St. Alphonso's pancake breakfast/Father O'Blivion" from "Apostrophe (')" and "Zombie woof" from "Overnite sensation". On "Bongo fury", "Cucamonga" is another example and I'll return to this topic in the "Drowning witch" section. Here's a transcription of a section of the opening of Debra Kadabra.

It's built as:

- a) Tempo I, moderate tempo.
- Bars 1-3 in 4/4. Opening guitar riff motif, repeated from the beginning of the song through 0:23, with Captain Beefheart reciting the text.
- b) Tempo going from tempo I to tempo II, faster.
- Bar 4-5. Transitory bars. The guitar ends in tempo I. The drummer starts with 5/8 in tempo II.
- c) Tempo II.
- Bar 6 in 12/8. A twice repeated motif starts. Beefheart has begun singing.
- d) Tempo going from tempo II to tempo III, a little faster.
- Bar 7-8. Transitory bars. Beefheart ends with "(con)-fetti" in Tempo II. The bass guitar starts with 5/8 in tempo III.
- e) Tempo III.
- Bar 9, 14/8. Instrumental motif, played once.
- Bar 10, 11/8. Eleven drumbeats.
- Bar 11-13, 12/16. Three times repeated motif.

The first three motifs in bars 1-10 have in common that they are built upon A. The first one has frequent off-beat drumming, but mostly a downbeat on the bass drum. The guitar plays through the Am7 chord. The scale is A Dorian, with the F# from this scale to appear first in bar 6. This second motif in bar 6 is a 12/8 on beat movement with a IV-I progression in A Dorian. The third one in bar 9 begins with some fourth intervals and also ends on A. The chromatic fourth motif in bars 11-13 sets a new direction. This procedure continues till the end of the song. It needs time for rehearsing and memorizing to play pieces like this.

The lyrics of "Debra Kadabra" are about common youth memories of Beefheart and Zappa. The larger part at first only understandable among themselves, though Zappa would explain some of its episodes in later interviews, for instance what the film Brainiac was about. Some lines from the lyric renditions on the net are meager attempts to mold the text into a more understandable form. When you listen to the lyrics phonetically, I have my doubts. I don't have a clue what several phrases should be either. Frankly I don't think Zappa wanted these lyrics to be understandable and Beefheart's shouting them works here quite effectively in creating an atmosphere of controlled madness. It is for this reason and the contrariness with the abstract complexity of most of the song that the minor third movement of the ending theme comes out so strong. The emotions suddenly become very recognizable, at least musically. The second example has this transition to a degree. It's also in odd meters (5/8, 9/16 and 7/16) and also including a tempo change. Bars 1-2 represent the bass motif in D Dorian as it is played during the section with Beefheart reciting the lyrics. You can't get Beefhearts voice here properly into standard midi format. In bar 8 the song changes to what can be interpreted as E Dorian with the chord progression I-IV-V-IV (the minor third movement then seen as the I chord). Over it the IV chord keeps being sustained in the descant (keyboard chord from staff 1). It's also possible to explain it as A Mixolydian with the whole of bar 8 seen as A7, but when Beefheart starts singing the A chord has (temporarily) stopped and the single minor third towards E dominates.

Oh DEBRA, ALGEEBRA, EBNEEZRA KADABRA!
WITCH-GODDESS of LANKERSHIM BOULEVARD!
Cover my ENTIRE BODY with AVON CO-LOG-NUH,
And drive me to some relative's house in EAST L.A.
(Just till my skin clears up)

Make me buy 'THE FLOSSER'! Make me grow BRAINIAC FINGERS, (But with MORE hair)

Make me kiss your turquoise jewelry!

EMBOSS ME!

Rub the hot front part of my head

With RENTED UNGUENTS!

Give me BAS-RELIEF!

Oh, DEBRA FAUNTLEROY-MAGNESIUM KADABRA!

On pages 152-3 of the 1984 "Them or us" book part of the lyrics from "Debra kadabra" are being reproduced (Pinter & Martin edition). Regrettably not all of them. Two samples are shown above.





Debra Kadabra, 2:35 through 2:56. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

2. Carolina hard-core ecstasy

"Carolina hard-core ecstasy" is available in three live versions. Two in Zappa's own catalogue, one by the ZFT. Below I'm comparing the instrumental opening bars of these renditions, that cause different analyses of especially the harmony. The meter is all 4/4, but there are smaller rhythmic differences too.



Carolina hard-core ecstasy, 1975, opening. Transcription: KS (update spring 2017, deposited at the I-depot, The Hague).

- bars 1-4. Theme one of two bars, played twice. The chord progression is C-Em-Am7-D.
- bars 5-8. Theme two of two bars, also played twice. This is a small melodic line, where the second bar is a rhythmical variant upon the first one.

The key is unmistakably C Lydian. With also the sung theme three following upon it, this seems to be the only interpretation, that's logically possible. Nevertheless, the 1984 execution necessitates a re-assessment of this situation. Not by changing notes, but by adding diatonic notes, that weren't used in some bars of the 1975 performance.





Carolina hard-core ecstasy, 1984, opening. Transcription: KS (update spring 2017, deposited at the Idepot, The Hague).

- bars 1-2. Here you have an A bass pedal, while the bass paused in 1975. So these two bars are in A Dorian in the 1984 version.
- bars 3-4. In bar 4, staff 5, you've got an additional figure with an F natural.
- bars 5-8. With this figure continuing, the F only shows up as natural during these bars, while in the 1975 version the F/F# isn't used. So the 1984 version sets these bars to C major. There are some minor rhythmic differences between the 1975 and 1984 versions and the high descant keyboard part is handled differently. In the 1975 version this keyboard plays along with the lead melody, to a point, while in 1984 it's just a sustained fourth (A-D).
- bars 9-10. The sung bars start, now stable in C Lydian.

One always has to bear in mind that analyses of Zappa's songs in this study are based upon the specific execution, being mentioned. Much of it will also apply to other versions, but it can't be taken for granted. It may also be that future releases by the ZFT or original scores shine yet another light upon several compositions. In this case one might conclude that the "Carolina hard-core ecstasy" intro is brightly in Lydian (1975 version), while the 1984 performance does the opposite. Instead it's an example of mingling major and Lydian, like Zappa also did in "Echidna's arf (of you)" and "Inca roads".



Carolina hard-core ecstasy, 1976, opening bars. Transcription: KS (update spring 2017, deposited at the Idepot, The Hague).

The opening of the "FZ:OZ" version from 1976 does sound somewhat different. Here the chord progression from theme one has been changed to C-Em/Cmaj7-Bm-D, so with a Bm chord instead of an Am7 chord.

The guitar solo in this song is upon a pedal note, a G-F figure. With the F being the lower note and being sustained far longer, I consider the F the tonic for the solo and the key F Lydian at this point. In his response to me you can read that Brett Clement prefers the G to be seen as tonic. In that case the key for the solo would be G Mixolydian.

3. Sam with the showing scalp flat top

Track 3 is one of the two poems Don is reciting. It does have some shorter accompanying motives by the band. Beefheart gets credited solely, so it can be assumed that these motives are written by him. The title of the album is derived from the final phrase, "I wish a had a pair of bongos, bongo fury".

4. Poofter's froth Wyoming plans ahead

"Poofter's froth Wyoming plans ahead" is mainstream country music, a cowboy song as Zappa is saying during its introduction. Quite in its place in Austin, Texas. Beefheart is singing it with his usual odd voice, but on this occasion one might like to hear it with normal singers too.

To the right: Zappa and Beefheart in the desert. It's an outtake from a photo from the Bong fury cover session, the photographer thus being John Williams. Eventually they decided to use a shot with them sitting in a cafeteria.

5. 200 years old

With tracks 4-5 Zappa is on far more familiar grounds than during the album opener. "200 years old" is blues. He liked the blues as a teenager and he would repeatedly return to it during his career. On "The lost episodes" we can hear him playing through the blues scheme with his brother Bobby in "Lost in a whirlpool", when he had just learned to play guitar in 1958. Some other later blues recordings are "Big leg Emma" on "Zappa in New York" and "In France" on "Them or us". "200 years old" starts with a riff build around a traditional blues motif, here played in G Dorian as G-C-B flat-G by the piano (in the 4th pdf version of this study I'm calling this example minor, but I misheard a chord: the E is natural). Some extra is given to it by a counter-movement F-C-F sharp-G by the synthesizer.



200 years old, opening. Transcription: KS (2nd printed edition, 2001). The bass plays vaguely in the background along with the low piano notes.

During the song the traditional blues chord pattern is followed (I-IV-I-V-IV-I). Here in G Dorian with starting points:

- I. 0:29. The melody as above continues. Zappa tells about his thoughts at an early breakfast.
- Basically I. 0:57. Beefheart sings the theme of the song.
- IV. 1:26. Harmonica solo starts.
- I. 1:32.
- V. 1:39.
- IV. 1:42.
- I. 1:46.
- I. 1:52. Guitar solo begins. The blues scheme recommences.

Or in "Big leg Emma" from "Zappa in New York" in E (major/Mixolydian):

- I. 0:07.
- IV. 0:14.
- I. 0:18.
- V. 0:22.
- IV. 0:24.
- I. 0:25. Etc.

For complete blues scheme transcriptions, see:

- the Movie scores section with "The world's greatest sinner".
- The Cucamonga years section with "Grunion run".
- The Zappa in New York section with two examples from "Big leg Emma".
- The Läther section with "Duck duck goose".
- the Sheik Yerbouti section with "Dong work for Yuda" (Hammersmith Odeon version).
- the Guitar section with "Sexual harassment in the garage".

See the Imaginary diseases section at "Been to Kansas City in A minor" for more about blues.

6. Cucamonga

The transcribed section of "Cucamonga" below is characterized by the permanent changing between 2/4 and 3/4 and changing between two scales. It has an instrumental introduction of some normal 4/4 bars in A Mixolydian. Then the sung theme starts in Eb Dorian in 3/4. In bar 8 the meter changes to 2/4 and in bar 9 the key has become G Lydian. The modulation is done chromatically in bar 8. First Eb becomes E, then Ab becomes A, next Gb and Bb turn into G and B. This idea keeps returning in the song.







Cucamonga (1975), section. Transcription: KS (update 2009, deposited at the I-depot, The Hague).



Cucamonga part from Farther O'Blivion (1972), opening. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

At first "Cucamonga" didn't exist as a separate song. It was played in 1972 and 1973 as the finale of a larger composition, called "Farther O'blivion". It can be found this way on "Imaginary diseases" by the ZFT and the "Piquantique" bootleg. The "Big swifty and associates" part of "Greggery peccary" was the opening of this piece while the "Be-bop tango" formed the middle block. See the Roxy section for the tango part. The opening of "Cucamonga" in this manner is also presented above, transcribed from "Imaginary diseases" (1972). Here it's arranged for a brass band and has no words. For the "Bongo fury" version Zappa followed the original quite literally. Normally Zappa's rhythms are speech influenced, here it's the other way round. The lyrics were added later on. Sometimes the rhythm of the words fits in normally, as for "many years ago". At other instances this is not the case, as for "cu-ca-mon-ga". In spoken language these syllables are of about equal duration. In the sung section of bars 5-7 the "cu" and "mon" syllables last much longer than the "ca" and "ga" syllables. Thus you get a peculiar type of diction. It sounds interesting for a change, with the "Farther O'blivion" version explaining how it came into being. Zappa apparently liked it this way. Otherwise he would have adapted the rhythm of the melody to the words.

7 Advance romance

The lead melody from "Advance romance" can be found in the Ludwig study, page 268. Next is the main theme, as transcribed by him. It's notated as if in G minor, but in the context of the whole song, G Dorian suits better (the solos are in Dorian). The E/Eb however, that makes the difference, is avoided during the main theme:



Advance romance, main theme. Transcription: W. Ludwig.

- 0:00 Little instrumental intro with phrase one from the main theme.
- 0:08 Main theme. As you can see, the main theme is made up of three phrases. The meter is 4/4, occasionally interrupted by a bar in 3/4 or 2/4. Triplets and altered notes are getting used. Notable is the wide vocal range, used for the lyrics. It's sung by Napoleon Murphy Brock.
- 2:39 Solo in G Dorian by Danny Walley on slide guitar.
- 3:55 Harmonica solo by Don van Vliet.
- 4:56 Second guitar solo by Zappa himself.
- 8:49 Main theme variations.
- 11:04 Coda.
- 11:17 End.

8. Man with the woman head

"Man with the woman head" is the second poem Don is reciting. At this point Don could recite the text from Zappa's "The torture never stops" too as if it was a poem. These lyrics preceded the later song on "Zoot allures". On "YCDTOSA Vol. IV" you can hear this particular performance, accompanied by a vamp.

9. Muffin man

"Bongo fury" ends with the hilarious concert closer "Muffin man", a song that everybody seems to like. It has a four-bar central theme in F# Dorian. After being sung, it's used as a vamp for a guitar solo. The album has a studio recorded introduction with George Duke on keyboard and Zappa reciting a text about the laboratory of the muffin idolater. The second on-line midi file includes the last bars, but it's hard to catch the words of someone speechwise singing/talking into midi format. It has no alphabet and sounds as a cheap imitation. You can open it for what it's worth.





Muffin man, section. Transcription: KS (update 2006, 3rd printed edition).

```
Notation:

Jeminuted, distorted by Pick or palm

In Harmonic (fret indicated)

or teedback (indicated)

t Quarter-tone sharp

the Three quarter-tone sharp

to Quarter-tone flat

Accent

A Staccate
```

The bars with the recitative can hardly by assigned to scales. Bars 1-2 contain the chord progression Daugm.-Faugm.-G#dim. Next you get a two-bar figure that gets varied upon. Central stands a descending third as in bar 4. It returns four times, each time a minor third higher. From bar 8 through bar 13 the piano part in the F clef staff follows a sort of a walking bass line to accompany it. In the Ludwig study (page 223) the central theme in bars 14-16 gets explained as a I-IV-V progression (with F#-B-C# as the central notes), an example of Zappa following an easy chord progression. Indeed you can harmonize the theme in this manner and the theme does sound familiar.

In 1976 Zappa's partnership with Herb Cohen came to an end. Cohen had been successfully managing The Mothers, especially in the first years, and had set up Discreet Records with Zappa as a label of Warner Brothers. Discreet was used as a vehicle for Zappa's albums but the main reason for its existence was business, namely earning money be contracting groups for it. In 1976 Zappa found that Cohen was allocation the incoming money with too much liberty. The financing of the recording of Beefheart's new album "Bat chain puller" for the label was the direct cause for the breach; Zappa thought that it had been paid for with money that was his. So Zappa as president of Discreet set Cohen aside and Cohen counterattacked with a lawsuit, demanding that Zappa's assets were to be frozen during the trial and that he would have no access to the tape archive, which was granted. At the same time Zappa had started dealing with MGM, who had brought out the first five records. They were bringing out compilations without paying him appropriate royalties. This case was solved relatively quickly. Zappa obtained the mastertapes and a financial compensation. But since the tapes went into the Discreet inventory it was to no direct avail.

Zappa's next "Zoot allures" album and Beefheart's new album were to be released on Discreet. He had safety copies of the tapes in his house and could release his album on the Warner Bros. main label, on condition that he indemnified them in case Cohen could lay any claim upon it. But Beefheart was forced to record several tracks anew for his later "Shiny beast" album with "Bat chain puller" added to the title between brackets. The original recordings are still in Zappa's vault today, officially released in 2012. Beefheart made two more albums in the early eighties and then had enough of the music business. Since then he continued with his second career as an art painter.

Zoot allures - Zappa in New York (1976-1978)

When all members of the Roxy band had left, Zappa decided to stop using the name Mothers Of Invention, continuing under his own name only. Another new band participated on the rock-based Zoot allures album with Zappa himself appearing as a multi-instrumentalist. He now started touring with a smaller band of five or six members. Live material with this band has mostly been released by the ZFT. Zappa himself recorded Zappa in New York, with this band augmented to 12 persons for his December 1976 concerts only. This album includes The black page, his best known example of composing with irregular rhythmic groupings. The refusal of Warner Bros. to include Punky's whips was one of the reasons for a clash, only ending with a settlement in 1982. Next Zappa proceeded with a plan to release the material he had in stock as a quadruple album called Läther, to be halted by Warner Bros. issuing these pieces themselves as four individual albums (Zappa in New York, Studio tan, Sleep dirt and Orchestral favorites).

ORCHESTRAL FAVORITES - STUDIO TAN: CLASSICISM AND MODULATIONS

ORCHESTRAL FAVORITES

In 1975 Zappa hired a group of session musicians to form the 37-piece Abnuceals Emuukha Electric Orchestra with Michael Zearott conducting (photo to the left taken from the "Quaudiophiliac" DVD by the ZFT). He did two live concert evenings with them including himself on guitar and the rhythm section of his rockband. The recordings landed mostly on "Orchestral favorites", but some sections also on "Studio tan". Their release got delayed because of his clash with Warner Bros. (see the Zappa in New York section). "Studio tan" appeared in 1978 and, when he was back in business again in 1979 with "Sheik Yerbouti", Warner Bros. released these last "Orchestral favorites" tapes they had in their closet with a non-informative low budget album cover, four years after their recording. Zappa himself called the album "ill fated". With this CD he mostly returned to earlier compositions from "200 Motels" as he would do again later on with the "L.S.O. Vol. II" album of 1987. "Orchestral favorites" never has received much attention, partly because the compositions all returned on later albums with a higher sound quality (except for "Duke of prunes"). But by itself there is nothing wrong with this album, quite the contrary.

1. Strictly genteel

In the "200 Motels" closing piece "Strictly genteel" the variations form is used with "Lord have mercy..." as the central theme. It's the most classical piece in Zappa's output. Not only because of its variation form, also because of its use of standard chords and a steady meter. "Strictly genteel" re-appeared on the "Orchestral favorites" and "L.S.O. vol. II" albums. See the London Symphony Orchestra section for the details and a number of variations upon this theme (harmonically as well as using counterpoint).

Another directly recognizable classical form is the following. On "200 Motels", disc 1, tracks 14-18, the rondo set up is used with "She painted up her face" as the central theme (see the 200 Motels section for this theme). Musically as well as lyrically this is a clearly rounded off story about a groupie preparing herself for going out (numbers are the track numbers):

- 14. 0:00. Theme A: She painted up her face.
- 14. 1:06. Theme B: The secret stair she could use.
- 15. 0:00. Theme C: Janet's big dance number.
- 16. 0:00. Theme A: The clock upon the wall.
- 16. 0:45. Theme D: Half a dozen provocative squats.
- 17. 0:00. Theme E: Mysterioso.

- 18. 0:00. Theme A: She chooses all her clothes.
- 18. 1:00. Theme F: Shove it right in.

2. Pedro's dowry

Of a completely different nature is "Pedro's dowry". It's atonal, difficult and versatile to the point of getting brutal. "Pedro's dowry" also returned on the "L.S.O. vol. I" album. Other than tracks 1, 3 and 5, it remained basically the same, that is without additions or re-working upon its construction. Excerpts from this composition are presented in the L.S.O. section of this study as well.

3. Naval aviation in art?

"Naval aviation in art?" knows three versions, one on "Studio tan", one on "The perfect stranger" from 1984, and one existing mainly on paper only. The latter as "Jeff and Don", of which only a small section can be heard during the film version of "200 Motels" (it's not included in the soundtrack CD, nor in the Suites edition of "200 Motels"). The two fully recorded versions are pretty different regarding their details. All three versions are being dealt with in the The perfect stranger section of this study.

4. Duke of prunes (1963-1975)

On "200 Motels"/"Orchestral favorites"/"L.S.O. Vol. II" there are some examples of the use of forms that you might call "classic". We'll take a look at a sonata movement, a rondo and the variations form. The term sonata form can either refer to a piece for one or two instruments made up of several movements or to the construction of a single movement. Zappa didn't do the first, but "Duke of prunes" ultimately developed into something of a sonata movement in the second meaning of the word in three stages. Theme A of the 1975 movement is the "Original duke of prunes" from the "Run home slow" soundtrack for a small chamber ensemble. In this soundtrack from 1963 theme A is played over the Fmaj9 and Em9 chords alternating, similar to the "The duke of prunes, 1967" version from "Absolutely free". In that section the keys are identified as E Phrygian and E minor. Up till the 4th edition of this study I called these two chords I 7th and II 7th of A Dorian, but I misheard an F being natural during the first chord (and there's an E pedal note, better to be taken as tonic). It doesn't really sound wrong as I had it originally, but one note being different can be sufficient to get your analysis wrong.







Original duke of prunes. Transcription: KS (update 2005, renewed in the Spring update of 2018).

The T7/T5 cycle can also prove consequential in progressions between Lydian systems. The main theme of "Duke of Prunes" (ACE/ECE 1963/1967), for example, features an accompaniment that alternates regularly between the F- and G-Lydian systems (see Example 4.59). Like many of the progressions between systems witnessed thus far, the pedals employed here create a semitonal bass motion F (Lydian) to E (Dorian). Even before the entrance of the main melodic theme, the T7 interval cycles of the two Lydian systems are invoked. As shown, above both the F and E pedals, the first three pitches of their respective Lydian fifth-stacks are

¹¹⁰ An earlier performance of "The Deathless Horsie" from Halloween 1978, as heard on the DVD-A Halloween, contains a more complete quotation of "Black Napkins" at 12:38.

¹¹¹ In the original version of the piece, from the movie score Run Home Slow (1965), and in the first statement of the theme on Absolutely Free (1967), a single E pedal persists throughout the theme. This suggests that F Lydian has the role of a kind of "upper neighbor" to E Dorian. This reading is supported by the presence, in the Run Home Slow score, of additional orchestral cues based on the "Duke of Prunes" theme solely in E Dorian. In the second statement of the theme on Absolutely Free, and for a later orchestral version circa 1976, as heard on Orchestral Favorites, the pedals do oscillate between F and E.

stated in quintal formation. Over this oscillating accompaniment, the theme is stated three times, the second and third statements being isomelic variations and/or fragmentary versions of the pitch succession of the initial statement. As indicated on the example, this theme unfolds a T7 cycle. However, this T7 cycle is not that of the F- or G-Lydian fifth-stacks, but that of C Lydian. The first three pitches of the theme (G-C-B) are the only pitches that are "out of order" within the T7 cycle. By inverting the order of C and G, and following C with its leading tone B, the pitch C emerges strongly as a tonic in the melodic zone. Importantly, however, the pitch C is not a common tone of both Lydian systems of the accompaniment, as it is not included in G Lydian (even though it occurs several times over the Dorian pedal E). Nevertheless, the C-Lydian collection contains an identical number of common tones with both systems, being one fifth in distance from both F and G Lydian. Therefore, its pitch collection abstractly mediates between the Lydian systems of the accompaniment.

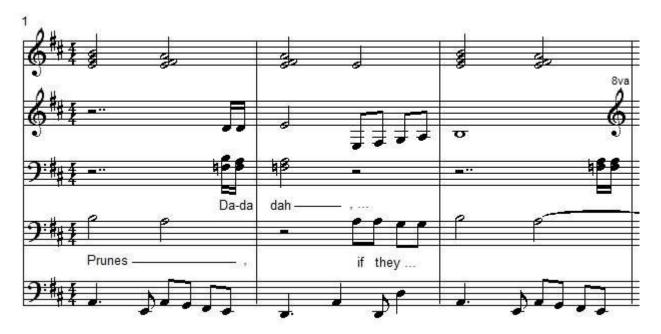


The duke of prunes analysis from the Clement study.

The main theme from the "Duke of prunes" is also coming by in the study by Brett Clement. I've added his analysis to the example from above. In the left menu you can find a discussion between me and Brett taking place about keys. Since I made some mistakes here, some further comment is in place. As I'm hearing it now all versions of theme A are alternating the Fmaj9 and Em9 chords.

- Brett calls Fmaj9 over the F pedal F Lydian. Correcty so, I agree. Brett calls the bars over an E pedal E Dorian.
- Fmaj9 over an E pedal: no, that's better called E Phrygian.
- Em9 over an E pedal: not really accurate neither. Nowhere does the C turn up as sharp. In these specific bars it concerns the lead melody. Brett tries to explain this away by stating that the sung lead melody follows C Lydian, as if some kind of bitonality is taking place. That's pretty far-fetched, even for the lead melody by itself. When you call these bars E minor, all parts go by the book.

After 1963 "Duke of prunes" returned twice. On "Absolutely free" in a rock band version with additional themes and lyrics like the section below, that represents half of theme B. The key tends towards E Dorian, but not really in a stable manner. Altered notes turn up as well and the vocalists are sometimes singing rather flat. Then in 1975 it's turned into an instrumental sonata movement with some freedom. Here it's played by wind instruments, brass and a rock combo of four persons (guitar, bass, percussion and drums). The third section below is from this 1975 execution, beginning with one of the guitar intermezzi from the block in the middle, followed by the orchestra playing.





The duke of prunes regains his chops, section. Transcription: KS (update 2005, 3rd printed edition, 2007, renewed in 2018).





Duke of prunes, 1975, 2:55 till 3:20. Transcription: KS (update 2005, 3rd printed edition, 2007).

Notation:

Jeminuted, distorted by pick or palm

In Harmonic (fret indicated)

or feedback (indicated)

t Quarter-tone sharp

the Three quarter-tone sharp

to Quarter-tone flat

Accent

A Staccate

The construction of the 1975 version goes as:

- 0:00 Theme A.
- 0:41 Theme B.
- 1:16 Theme C.
- 1:28 Middle section, guitar solo.
- 2:07,, orchestra and guitar intermezzi.
- 3:24 Theme A returns.
- 4:03 Coda.
- 4:19 End.

At the beginning theme A is played over A-E-F-E as subsequent bass pedal notes at first, next F and E alternating. Former issues of this study wrongly said G-A, rather careless, but with 450 examples errors like this happen. Thus it goes similar to the second example from the 1967 version. Also here the chords are Fmaj9 and Em9. These two alternating bass notes return as the accompaniment basis for the guitar solo. Other examples that relate the middle block to the opening themes are for instance:

- The motif E-G sharp-F sharp of theme B ("And I know,...") returns at 2:45.
- The opening motif of theme C (F-G-A flat, "And so my darling...") returns slowly at 3:05, followed by a down going fourth, that's so characteristic of theme A.
- The triplet time at 0:59 returns at 3:17.

The transcribed section begins with a little solo section of 8 bars over a bass lick playing around a G#-B-D movement. The key is G# minor or Phrygian (there's no A or A# to determine which one it is). Next the brass re-enters and the guitar starts feedbacking for some bars. The band modulates to a different scale. The bass pedal note in bars 14-17 has moved to F, so you could say this part is in F minor. Or with the first chord being Bb you could say it starts in Bb Dorian, but the changing bass notes don't let any note really function as key note. In bar 18 the piece modulates again, now to E. The incomplete ending bar of the transcription marks another transition to C Lydian.

5. Bogus pomp (1975)

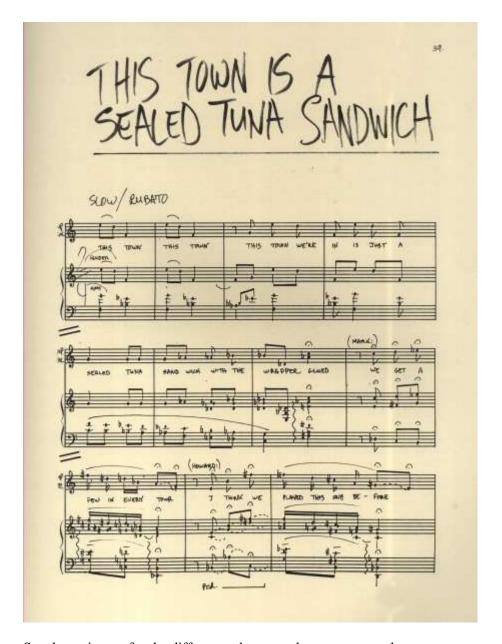
The "Tuna sandwich" suite from "200 Motels" reappeared on "Orchestral favorites" and the "L.S.O. vol. II" albums (this suite being disc I, tracks 4-8 from "200 Motels"). All in a new jacket with additions and a different sequence. It got renamed as "Bogus pomp". The L.S.O. version also includes the "Overture" and "Centerville". I'm taking some sections from this composition to give some examples how Zappa could use variations. The main theme below, "This town is a sealed tuna sandwich (prologue)", is introduced slowly with lyrics on track 4 of disc I of "200 Motels".



This town is a sealed tuna sandwich (prologue). Transcription: KS (update 2005, transcribed from record, reduced). Notes:

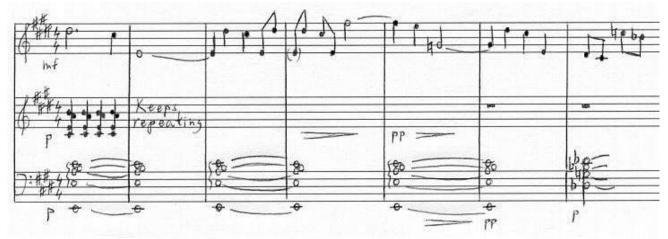
- The descant is among others a violin like instrument playing, Flo and Eddie are singing parallel an octave lower.
- The original score is possibly included in the "200 Motels, the suites" scores, that Barfko Swill is selling. Handwritten scores have been handed over to the London Philharmonic Orchestra in 1971. In December 2008 I encountered some samples from one of the original bundles, being sold on e-bay, including the above example.

There are some differences between the sheet music and the album version. Zappa notated the "Prologue" in 2/4 with the eighth note as basic time unit. It has a tempo indication in its header: "Slow, rubato". The piece is indeed performed in a rubato way, the tempo isn't constant all through. I've added the metronome tempos at various points in the transcription from above according to how it's performed on record. Again, as in "Nun suit" from the earlier "200 Motels" section, during the actual recordings for "200 Motels" some modifications upon the score were made. The sustaining of the notes "We get a ..." and "I think we ..." was skipped, they are sung as normal eight notes. On the other hand the ritenuto effect wasn't prescribed. The sustained fourth and eighth notes for "Glued", "Tour" and "(Be-)fore" are notated via normal half notes in my transcription, but that duration could very well be a coincidence, in the sense that sustaining them augmented them to more or less the duration of half notes. Due to the rubato it becomes difficult to say what the best notation is. Notable is that on record a Db and a Bb in the bass were added as pick up notes for restarting singing after the sustained notes. The actual accompaniment is less elaborate than as notated. Maybe I'll look into this again and include a literal midi file of the original score version as well in a future update.



See the main text for the differences between these two examples.

This main theme gets varied upon on several occasions. Beneath are three of its re-appearances in "Bogus pomp": first its reintroduction, then an atonal piano variation and thirdly how it's used during the coda.

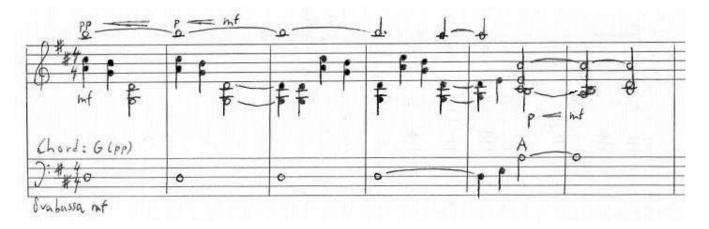


Bogus pomp, tuna sandwich theme (L.S.O. version, 6:56-7:03). Transcription: KS (see also the notes). All three examples: update 2005, 3rd printed edition 2007.



Bogus pomp, piano variation. Transcription: KS (see also the notes).

Note: this transcription has been renewed in 2010. The rhythm was previously correct, but the dots were somewhat incomplete and inaccurate.



Bogus pomp, part of the coda (Orchestral favorites, 12:03-12:16). Transcription: KS. Notes:

- The 1983 large orchestra score of "Bogus pomp", used for the L.S.O. recording, is for rent at Barfko Swill. The piano variation is here executed by the string sections of the orchestra.
- The original 1975 score is possibly included in the "200 Motels, the suites" scores, that Barfko Swill is also for rent.

"This town is a sealed tuna sandwich (prologue)" is atonal. The first and third variation above are diatonic however, in E and D respectively. In the third example the D by the bass guitar dominates the lower register for "Orchestral favorites", but there's also a G chord in the background. It's hard to hear how this chord is positioned straight from record. On the L.S.O. version the D dominates less and it looks like the B of this chord is the pedal note, or possibly the G. The piano variation is also present in this study in the shape of a re-orchestration for strings as the "Bogus pomp" (1983) example in the L.S.O. section. "Dance of the just plain folks" and "The sealed tuna bolero" are other sections from "Bogus pomp", that I'm dealing with in the Fillmore East 1970 and 200 Motels sections.

STUDIO TAN

1. Greggery Peccary

From the start of his career Zappa was interested in combining music and literature in the shape of opera's, movies and stories set to music. In 1964 he was busy with the little opera "I was a teenage maltshop" and the "Captain Beefheart vs. the Grunt people" movie. Both projects remained unfinished. Such ideas of combining music and texts exist in classical music in various forms as for instance in symphonic poems, but are rare in rock music. Zappa did two stories put to music as one bigger piece, namely "Billy the mountain" from "Just another band from L.A." and "Greggery Peccary" from "Studio tan". Both have one ongoing story, but musically they are constructed completely different. Whereas "Billy the mountain" has central returning themes, "Greggery peccary" is a sequence of some 25 short individual compositions, which are mostly unrelated. Both pieces have their advantages and disadvantages. "Billy the mountain" is the better unity, but "Greggery Peccary" has far more music to it. There are quite some things that Zappa did once and only once in his career and "Greggery Peccary" is one of them. Included below are five fragments, partially transcribed, partially parts from the original score. The first one is the opening theme, that returns twice. The second one is modern atonal music in 7/8 with two- and three-part counterpoint. Both are a mix of diatonic material from various scales and chromatic movements. The last one includes the New brown clouds central theme in G, that lasts 10/8 and gets repeated three times over a two-bar vamp in 6/8. So you get these two melodies gliding over each other.

The sequence of the little compositions in this piece generally goes as below, and can roughly be grouped into a couple of blocks. That is to say if you follow the musical styles and themes on "Studio tan" in combination with the subdivision Zappa himself apparently used for his scores. In 2007 the ZFT released "Wazoo" with a booklet, written by Zappa himself, that includes the plot as it existed in 1972 (sample to the right). "Greggery Peccary" was first designed as a little ballet, divided into six scenes. Zappa at that time give it little chance of being realized. In this particular form "Greggery Peccary" indeed didn't get staged, though it needs little imagination to visualize the narration from "Studio Tan" in your mind. For the Wazoo tour he took out four pieces of music separately. Doing so it has thus become entirely instrumental on "Wazoo" and the correspondence of the sections on that CD with "Studio tan" is added below. The "Swifties, such big swifties..." part originally stems from "Farther O'blivion", another 1972 composition, as released on "Imaginary diseases". See the corresponding Imaginary diseases section for the brass band set-up of this piece from that year. It turns out that the size of the blocks, as played on "Studio tan", eventually has become disproportional. Block III is very small compared to block I. It looks like the "Swifties, such big swifties..." section, part of block I, got inserted into the play later on.

I. A. Greggery on his way to office. This block opens with the "Greggery Peccary" theme, that returns twice.

It's about all modern music in this block.

- 0:00 "Greggery Peccary" theme (Wazoo: Mvt. I, 0:00-0:17).



Greggery Peccary, opening bars. Source/transcription: trombone part of the original score (see below), adapted and supplemented for the other parts to the Studio tan version by KS.



- 0:18 Introduction of "Greggery Peccary" with modern music (Wazoo: Mvt. I, 0:18-1:29, only some motifs correspond).
- 1:08 Modern instrumental section I.
- 2:28 "Greggery Peccary" theme, variation I (Wazoo: Mvt. I, 1:30-1:38).
- 2:38 Modern instrumental section II (Wazoo: Mvt. I, 1:39-2:38).
- 4:08 "Greggery Peccary" theme, variation II.
- 4:15 Narration about trendmongers with modern music.
- 4:49 Narration about trendmongers continues with a medley.
- 5:19 Modern instrumental section III.



Greggery Peccary, section. Transcription: KS (3rd printed edition, the original score has been made available to for instance the Ensemble Modern).

- I. B. Big Swifty and associates. This block is rock music throughout.
- 5:52 A normal rock vamp with Zappa talking.
- 6:23 "Swifties, such big swifties...", pop themes.
- 7:42 Second rock vamp with Greggery taking over the narration.
- 8:06 "We've got the little answers...", pop themes.
- 8:31 Third rock vamp with a text about inventing the calendar.

II The response to the calendar. This part has no specific musical tendencies; it's the story about how people are affected by the calendar with all kinds of styles.

- 9:06 "Sunday, Saturday...", narration with modern music (Wazoo: Mvt. II). 8va b

Greggery Peccary, opening bars from mvt. II. Transcription from the CD by KS, with several elements taken over from the below.





Greggery Peccary, opening bars from mvt. II, keyboard and trombone parts.

- 10:21 "Unfortunately some people...", narration with a medley of rock phrases.

III Instrumental interlude.

- 12:33 Modern instrumental section IV mixed with jazz (Wazoo: Mvt. III).



Greggery Peccary, opening bars from mvt. III. Parts from below, supplemented with transcribed parts from the CD by KS. Bars 1-2 contain irregular synthesizer sounds in combination with percussion.





Greggery Peccary, opening bars from mvt. III, keyboard and trombone parts.

IV New brown clouds. This part has a central "New brown clouds" riff and theme.

- 14:52 "New brown clouds" riff with narration (Wazoo: Mvt. IV, 0:00-0:38).
- 15:32 "New brown clouds" main theme (Wazoo: Mvt. IV, 0:39-0:52).
- 15:48 Rock progression with Greggery calling a philosopher (Wazoo: Mvt. IV, 0:53-1:22).
- 16:22 Zappa takes over introducing Quentin Robert Denameland.
- 16:45 Quentin speaks with some modern music (Wazoo: Mvt. IV, 1:23-2:35, only some motifs correspond).
- 17:07 "New brown clouds" riff with a mix of modern music and jazz (Wazoo: Mvt. IV, 2:35-3:28).
- 18:00 Modern instrumental section V, the riff has vanished and the modern music continues (Wazoo: Mvt. IV, 3:28-4:28).
- 19:04 "New brown clouds" variations (Wazoo: Mvt. IV, 4:28-6:05, its coda has some extra bars).

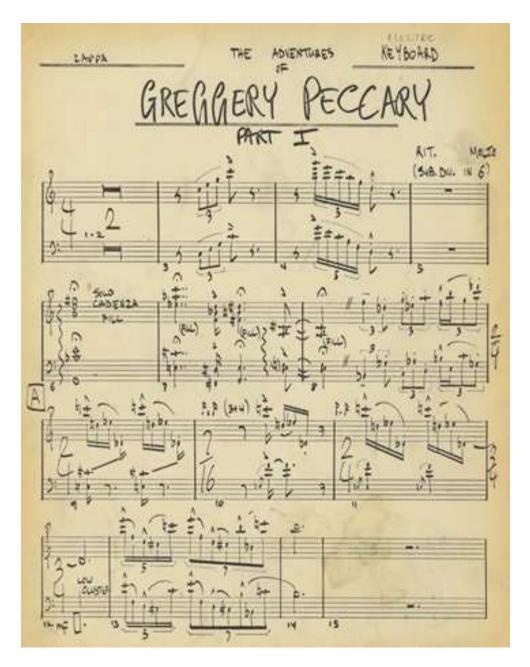


Greggery Peccary, New brown clouds theme. Transcription: KS (3rd printed edition, the original score has been made available to for instance the Ensemble Modern).

It sometimes happens that I come across the original score after I've included a transcribed example. Or that another recording sets a composition in a new perspective. Both happened with "The new brown clouds". The Wazoo CD by the ZFT contains an earlier version without lyrics for a big band. See the corresponding section for much more about "The new brown clouds (1972)". The example above contains the main riff and main theme, preceded by Zappa talking: "make your checks payable to Robert Quentin Denameland" etc.

- 20:34 End.

On the internet you can frequently encounter examples of original handwritten scores, that Zappa handed over to band members or orchestra members. Below the first page of the keyboard part of movement I. Apparently he didn't ask these scores to be returned systematically, even handwritten orchestra sheets. So he must have written a number of specimens of each score. It shows how time-consuming writing music must have been when there weren't computers or decent copy machines. In this case I could find samples from the keyboard and trombone scores, that have been used above. It's more a rule than exceptional that recordings differ from the sheet music. This can get confusing, both from the analytical point as for how exactly a piece should be performed. Regarding the "Studio tan" version, the keyboard part from the example from mvt. II is only included during bars 1-3 and the trombone part is absent altogether. It's clear one might add the total keyboard part, but I can't tell if this can be done for the trombone part too. Possibly it got substituted. On "Wazoo" it's the other way round. The trombone is present and the keyboard is absent. If you would play the keyboard and trombone part separately for bars 1-11, you would get at the midi file from the on-line version of this study (see the example above for the score).



What you can see is that this movement starts with rather abstract atonal music with varying meters. Relationships are established by for instance returning motifs (bars 1-2 and bars 10-11) and variations. Bar 6 is a variation upon bar 5 at double speed, created by meter change from 5/8 to 5/16. Rhythmic diversity exists horizontally. Vertically the parts are mostly following the same rhythm, the bass from bar 6 being an exception. On the album a tiny intro got added (9:06-9:10), with the chorus and Greggery singing/saying "Sunday, Sunday, wow", that isn't indicated in the score. In case of the opening of movement III, the CD version does use the keyboard and trombone part as they are. The only substantial difference is the insertion of an extra 16th note in bar 9, becoming 8/16 as 2+3+3 by doing so instead of 7/16 as 1+3+3. Also this opening is abstract atonal music with varying meters.

Still there are more version differences. In May 2018 John Tabacco wrote me saying: "There is a version FZ played of "Greggery Peccary" where the philos(t)opher is referred to as Quentin Robert Denameland greatest living "two headed" philostopher known to mankind. The dialog that is on "Studio tan" has been

severely edited out. It goes on quite a bit longer and fits in tandem to the music that is going on. I don't know why FZ cut it out but it really makes the whole movement make more sense." And: "As you know many of the parts on Greggery Peccary date back to the sixties and were performed with the Petit Wazoo band in 1972. That being said, the excerpt [mentioned below] was recorded in mono off the radio on April 18th, 1975 at Connecticut radio station WPLR. The rest of the work is pretty much the same up to the philosopher part. FZ added a few more overdubs on the "Studio tan" version but nothing too significant. Zappa and Beefheart were the guests and he played a variety of then unreleased material. This version of Greggery Peccary was one of them. The other oddity played was the full blown "200 Years old" which featured a lot more of George Duke's excellent piano skills. I suspect FZ edited it down to 4 minutes because it would have made side one of Bongo Fury a little too long and thus diminish the audio fidelity. I doubt there is any other reason because the unedited version is great." An otherwise unknown song from these radio broadcasts is "Will you drink my water", introduced by Zappa as a song by the "Smegmates". It's a little collage.

These files from radio broadcasts from 1975 can be found on internet as:

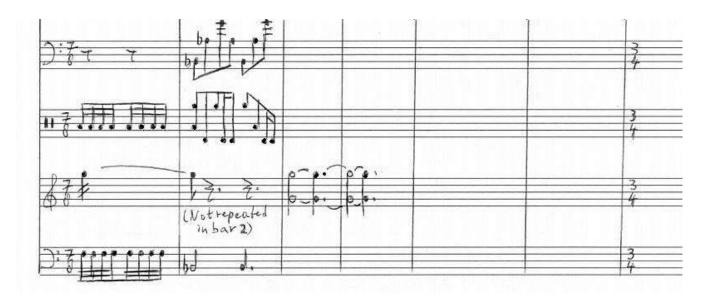
- Original Greggery Peccary.mp3
- 200 years old (unedited).mp3
- Will you drink my water.mp3

2. Music for low budget orchestra

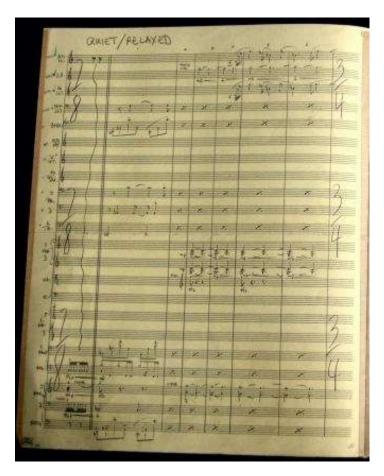
"Studio tan" was recorded during 1974-1975 with pieces by the rockband and sections with the above orchestra. The next examples stem from the introduction to "Music for a low budget orchestra". The chronology of this piece goes as follows:

- Composed in the late sixties at the time of the "Lumpy gravy" sessions.
- Premiere recording on a Jean-Luc Ponty album of 1970 (Jean-Luc Ponty plays the music of Frank Zappa).
- In 1971 the intro was part of the touring program with Ian Underwood playing the melody on clarinet.
- The score of the intro is published in 1973 in The Frank Zappa songbook, vol. I (1971 touring version).
- In 1975 it was recorded in total in the studio by a small orchestra plus some electric instruments (the same ensemble that did the "Orchestral favorites" tracks).
- This 1975 recording premiered on the 1978 release "Studio Tan", the official Zappa version.
- The 1971 live version of the intro in 1992 became included in "Playground psychotics".
- The complete score is nowadays available via Barfko Swill (see the scores section). The Ensemble Modern included this piece in their 2003 CD "Greggery Peccary and other persuasions".





(This page and the previous one should be combined, the score is too big to get it on one page in a legible form).

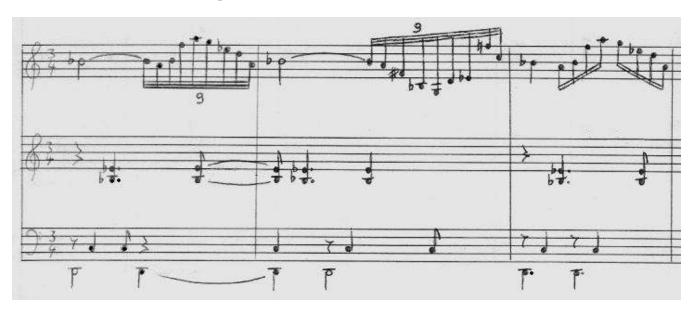


The original handwritten score.





Music for a low budget orchestra, bars 1-10. Source: original score. Notation for the drumset (bottom up): bass drum, snare drum, tom.



Music for a low budget orchestra, bars 12-14. Source: Songbook.

The opening bars of "Revised music for low budget orchestra" contain a lead melody, played over enlarged chords. In the Songbook these chords for bars 1-14 are notated as the following progression (with the bass pedal notes as tonic):

- bars 1-6: Bb Mixolydian with Bb13.
- bars 7-8: B minor with B11(-13).

(Zappa's score and the piano part in the Songbook don't use D/D#, so B minor is the standard diatonic scale being applied. The guitar chord B11(-13) in the Songbook is getting voiced as F#-B-F#-A-D#-F#. Played like that it doesn't follow a standard diatonic scale, but a major type of scale).

- bar 9: C Mixolydian with C13.
- bar 10-11: C# minor or Dorian with C#m7add6.
- bars 12-14: D Phrygian with D+7(b9).

They are played in the manner of the second example above (on CD: the "Playground psychotics"

version). Zappa's handwritten orchestra version (sample of bars 1-6 to the left) spreads these same chords out over the orchestra. This orchestra is made up of 22 parts, a normal size. The term low budget can be explained by the fact that there's only one member per part instead of sections. So you don't hear a string section on "Studio tan" but a string quartet. The score to the right was auctioned on internet recently and probably stems from the "Orchestral favorites" sessions. It's in Zappa's handwriting. For the actual performance on the album however, he eventually decided to strip down the score to its basics, being the lead melody plus drumset. So this sheet version in this specific form hasn't been available on album yet. It really sounds orchestral this way. The version that the Ensemble Modern is playing comes nearest (included in their "Greggery Peccary and other persuasions" CD from 2003). That one however is an Ali Askin arrangement of the original score, done specifically for this ensemble. The second example stems from "Playground psychotics". The bars in this case contain two ninetuplets. It's a jazz styled figure with the piano playing a series of eight notes just behind the third beat of the accompaniment. These bars are the 1971 version from "Playground psychotics" as printed in the Songbook (Ian Underwood on clarinet and with the keyboard accompaniment).

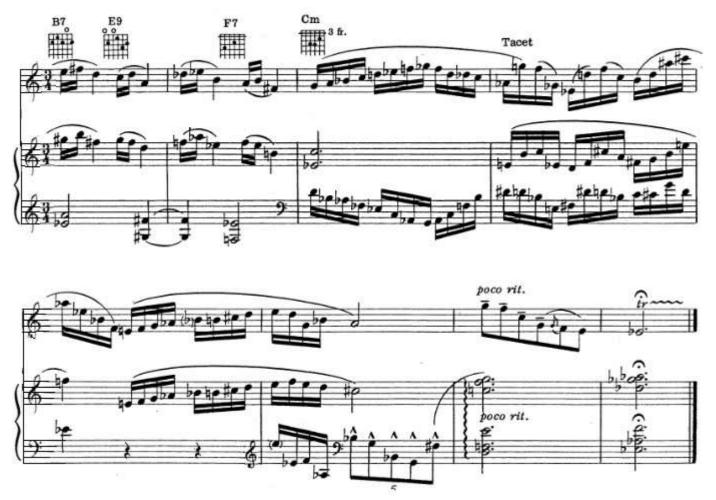
Like in "Greggery Peccary" you've got version differences of the same piece. Just the term "revised", that Zappa used on "Studio tan", indicates that there exists an earlier non-revised version too. Being that as it is, the following examples show three versions of the same couple of bars. Globally they are the same regarding meter, rhythm, movement and pattern. But at a detail level, there are many differences.

- A transcription from the CD, 1:23 through 1:47. Bars 36-37 are played in a manner that you're hearing a series of varying chords.
- An execution of the piano reduction from the FZ songbook vol. I. Bars 36-37 correspond with bars 28-29 from the Songbook (the difference is caused by the fact that the bars for acoustic guitars are absent in the songbook). These two bars comprehend counterpoint movements. The descant melody is present on the album, but the bass line isn't. It makes these two bars sound significantly different. One is homophonic, the other polyphonic.
- An execution of the keyboard and trombone part of the original score. The keyboard part makes it clear that Zappa instrumentated this piece at least in two different manners. The orchestral version from above and a more rockband-like or chamber ensemble version. The instrumentation of the keyboard part is typical of the seventies decade from the previous century. It names classical keyboard instruments next to electric keyboard types from that era. Because I've only got two parts, I can't tell how it would go in total. What you can see is that the keyboards and trombone are playing bars 36-37 as parallel minor thirds, thus again differently.

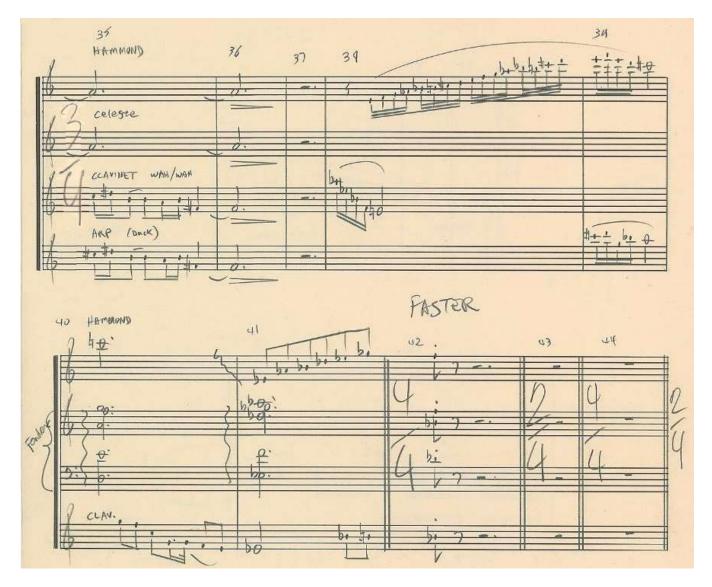




Music for low budget orchestra, bars 34-41. Transcription from the "Studio tan" CD by KS with material from the material below.



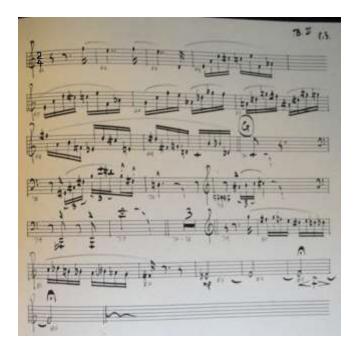
Music for low budget orchestra, bars 34-41. Source: Songbook.



Music for low budget orchestra, bars 35-44. Keyboard part of the original score.



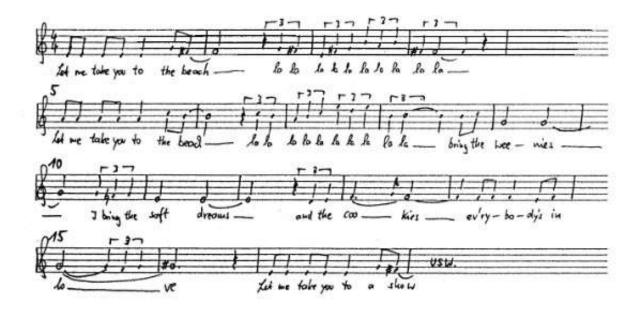
Previous page: Music for low budget orchestra, bars 27-42. Trombone part of the original score.



This last image is page three of the trombone part with section G as the last block, ending at bar 86. The composition doesn't end here however, nor does the brass section. The other example included above is the head of page two with section C.

3. Lemme take you to the beach

2. y) Let Me Take You To The Beach



Lemme take you to the beach, lead melody of themes I-II. Transcription by Wolfgang Ludwig.

The lead melody of themes I and II from "Lemme take you to the beach" are present in the Ludwig study on page 269 (see the references), while I've transcribed part of the interlude with all parts in it. It's the only piece on "Studio tan" that you can call a pop-song. At some points it sounds as a pastiche work, at other points it can get pretty volatile. The romantic lyrics at the beginning with just la-la-la added to it are very unusual for Zappa.

Its construction goes as:

First exposition of themes I-III.

- 0:00 Instrumental opening with a I-II alternation in A Dorian.
- 0:06 Theme I, phrase I, with the accompaniment continuing with the I-II alternation (bars 1-4 from the first transcription).
- 0:13 Theme I, phrase II. The sung melody gets transposed a fourth higher. The accompaniment switches to a IV-II alternation.
- 0:18 Theme II. At this point the song modulates to C. The bass follows steps I-VI-II-V of C. At 0:30 theme II ends with evading to E Mixolydian (bar 16).
- 0:32 Repetition of theme I with different lyrics.
- 0:44 Theme III. This theme follows a modulation scheme, C-Ab-G-C, the scales thus being a parallel movement of major type of keys. Most of the time there isn't a complete scale being used. The scales could be called major, but at various points Lydian and Mixolydian just as well. Like theme II, theme III has a final bar evading to E Mixolydian.

Instrumental interlude.

- 0:57 Theme I, the sung melody now being played instrumentally.









Lemme take you to the beach, section. Transcription: KS (update fall 2017, deposited at the I-depot, The Hague).

- 1:09 Variation upon theme II. At this point the second transcription begins. This part is something you could call pastiche-like. The sung melody and the chords form a series of triads and the meter and rhythm are standard 4/4 with an even subdivision. The bass follows steps I-VI-II-V of C once more (bars 1-7), again ending in E Mixolydian (bar 8). Next to giving pedal notes, the bass can also play little melody lines by itself in a syncopic manner. There are singers, but with them singing just "la-la-la", it remains instrumental. This ordinary "la-la-la" accentuates the pastiche effect.
- 1:21 Theme IV with a I 7th II 7th (plus E) alternation in A Mixolydian at first (bars 9-12). Rhythmically things are getting more complex. The meters become an alternation of two odd-numbered meters: 7/8 and 9/8. The parts can follow different subdivisions. During bars 13-16 the bass follows steps I-V-IV-V of A Mixolydian.
- 1:34 The modulation scheme with C-Ab-G-C (major type) returns. The final bar 24 modulates to E Mixolydian. This is where the transcription stops.

Return of themes I-II.

- 1:46 Themes I and II return as at the beginning.

Instrumental postlude.

- 2:11 Themes I and III once more.
- 2:33 Coda in C Lydian with a little guitar solo.
- 2:40 Once more the song modulates, now to B minor/Dorian.
- 2:44 End.

MODULATIONS

When I'm calling something a modulation in this study is briefly described at the bottom of the Burnt weeny sandwich section. As it comes to modulations, one has to distinguish between three areas in Zappa's music:

- Written diatonic music. Here Zappa modulates often and fast. Sometimes a key is only maintained for one bar. The Burnt weeny sandwich section gives an overview of the keys being used in all examples in this study. These are just outtakes, not complete songs. Even then you can see that modulations are happening in most of Zappa's songs. The above "Lemme take you to the beach" example is just one of many. It can also happen that Zappa is switching that fast, often not using all notes of a scale, that it is getting difficult to identify this as modulations in a meaningful way. Situations with series of fragments from different scales happen in pieces as "Sad Jane". In this study I've resorted to calling this "multi-scale", rather than try to identify each little section.
- Improvised diatonic music. Most improvised examples in this study are guitar solos, with Zappa soloing himself. Other than in his written music, Zappa preferred to stay in one key when soloing. This topic is being dealt with at large in the Shut up 'n play yer guitar, Guitar and Trance-Fusion sections.
- A substantial part of Zappa's music is atonal. Here the term modulation by definition doesn't apply.

One can also distinguish between types of modulations in Zappa's output:

- The mingling of two closely related scales with the same key-note. This happens frequently. It's a subtle way of modulating that goes that smoothly, that listeners are probably hardly aware of this taking place. It's more something you notice when transcribing material. You've got a couple of combinations of scales, that differ only by one note. In many examples you can see that this note turns up as natural as well as sharp or flat, without a good reason to call one of these two appearances altered. So in this study I identify this as both scales happening. The Guitar section gives an overview of such examples. Related to this are situations, where the note that makes the difference is avoided or absent. Sort of a six-tonic situation. In the latter case it remains unclear which specific scale is being used. For lack of anything better I also list these as both possibilities taking place (the absent note could be natural, sharp or flat).
- Changing a key by changing the pedal note, while the same set of notes keeps being used. This is also a smooth, rather easy way of modulating, but one you can directly hear. This can be taking place within a song but also between different versions of a song.
- Modulating to relatively related scales by altering one or a few notes, often in combination with a change of the key note. This is the standard, classical way of modulating. In harmony classes you are taught how to make such modulations sound fluid. You can look for a pivot chord, a chord that belongs to two subsequent keys. Or you can alter a note in a chord and then continue with the scale that includes this altered note. This classical form is also in Zappa's music happening quite a lot, though he didn't find it necessary to look for the most fluid transitions.
- Modulation schemes. When a series of modulations returns identically during a piece, you can call this a modulation scheme. The last example above includes a C-Ab-G-C scheme. Other examples can concern schemes for how a band should improvise. This is happening in the "Fifty-fifty" and "Blessed relief" examples from this study.
- Modulating to relatively unrelated scales. Doing this overnight is in harmony classes seen as an error. You are expected to play a number of transitory chords, before you can continue with the new unrelated scale. Here Zappa's attitude can be called deviant. He does make such modulations in a blunt manner and apparently liked the harmonic surprise effect it causes. Examples in this study are for instance "Uncle meat" (transition from theme 1 to theme 2) and "Would you like a snack?".
- Something he also frequently does is using material from different diatonic scales in a rather fragmented way as in "Sad Jane" or the third theme from "Uncle meat". Such effects can also be caused by playing chord types parallel. It's switching between scales, but it doesn't get referred to as modulating in a classical manner any more. It sometimes gets described as taking tonality to its limits or moving towards chromaticism/atonality.

Some examples in this study with parallel movements of chord types: "Hungry freaks, daddy", "Who are the brain police?", "Son of Suzy Creamcheese" (9/8 bar), "Let's make the water turn black", "The idiot bastard son", "Dinah-Moe Humm" and "Five-five-FIVE".

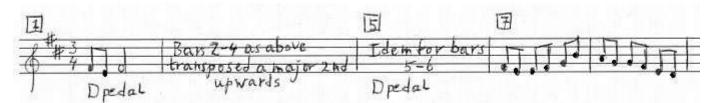
4. RDNZL

"RDNZL" was written in 1972 and first released on "Studio Tan" in 1978, renamed by Warner Bros. as "Redunzl". To the right one of the enraged figures Gary Panter drew for the 1978-9 covers. This time a mouse. "Sleep dirt" even includes an enraged lump of dust. An early studio recording of "RDNZL" is included on "The lost episodes" with Jean-Luc Ponty and Bruce Fowler doing a few solo bars. Later on the composition became more elaborate and usually included a guitar and a keyboard solo. For the first "complete" version on record (YCDTOSA vol. II) the song got augmented with a long through composed melody, following upon the opening theme as included in the second transcription below. Because of its length it now serves as the main theme. The larger part of this second main theme got transcribed by Wolfgang Ludwig in his study. The note example below contains the opening of both the 1974 and 1975 versions. Trying to identify its scales positively is treacherous; it depends upon how you look at it. One would normally call the 1974 version C major, but since there's no F/F# in it, it could theoretically also be identified as C Lydian. In the 1975 version Zappa appears to be ambiguous about the F/F# because you can see a bass pedal F at first and an F# for the harmonies. The F is in dissonance with the opening E of the melody and the F# of the harmony, so when the bass pedal note becomes A in bar 5 the sounding effect is that of a resolving situation. The chord progression being Fmaj9 (bar 1) resolving as Am7 in bar 5 by removing the dissonant F. So the feel of it becomes A Dorian with an F# in its scale. The larger part of the main theme in 1974 is an ongoing stream of eighth notes in 3/4. Yet in 1975 Zappa changed things again. The melody for the first 8 bars are identical to 1974, but next he had George Duke improvise in a syncopic manner for eight bars with the originally written material as basis. See bars 9-10 in the transcription to compare things. After these eight bars the first six bars from the opening return, followed by two new bars to form another block of eight bars. In this instance the theme is transposed up a major second and the pedal note has become D. The F/F# ambiguity would lead to a G/G# one, but in the two new bars at the end you can hear a G at 0:46 (1974), so here the song is in D.

The second section below contains the tail of this main theme, that precedes the guitar solo. Bars 1-8 are in Ab Major, mingled with Ab Lydian, ending with the Ab major scale being played downwards. The 12/8 is an irregular bar, both in its rhythm and notes. It's used to switch from the Ab major tail to the guitar solo part, setting the tempo a bit higher. The progression, that accompanies the solo, starts alone gently for 16 bars with the marimba gliding over it with sustained notes. It's one of Zappa's archetype progressions of two alternating bass notes/chords, this time in A Lydian combined with major. The accompaniment follows A Lydian, but when Zappa starts playing he alters the D sharp to D natural, thus using A major for his own solo.



RDNZL, 1974 and 1975 opening of the main theme. Transcription: W. Ludwig (lead melody of bars 1-8)/KS (everything else).



RDNZL, 8 bars from 0:39 onwards (1974 version) or from 0:33 onwards (1975 version). Transcription: W. Ludwig.





RDNZL. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

Little is known about how the various Zappa bands learned his songs. Not that it would have been a secret, the band members just seldom got asked. There a various side remarks in interviews on this topic though. The 1972 Wazoo band and the 1972-74 Roxy band were reading bands, so here Zappa scored out relatively a lot. Every once in a while you can encounter pages of handwritten scores that Zappa handed out being sold on internet. For his rock bands Zappa usually scored out a lead sheet with the main melody without instrumentation. The chords are sometimes written out in dots, sometimes indicated by their symbols. The bass can also be written out, but is mostly indicated by pedal notes. For the above first example from Greggery Peccary you can see that for the Wazoo band Zappa wrote his scores per instrument, as for an orchestra. The trombone part for Greggery Peccary, corresponding to the four 1972 movements, is one of the examples I found being auctioned at Christies.

Zappa didn't require that all of his band members could read scores, so the normal way of learning a song in rock music got applied just as well. That is learning a piece via demos, yet existing recordings and verbal instructions. The bigger and more elaborate a composition gets, the more difficult it becomes to use this pop method. It's virtually undoable to learn the lead melody of the "Black page" without reading

notes. Even if there wasn't a "Drowning witch interlude" being sold by the ZFT, you'd know that the score must exist.

There must be hundreds of sheets with sketches and neatly scored out pieces in Zappa's closets. A bewildering thing to notice is that for the first executions of his music, he frequently started adapting the score. There are many examples in this study showing how the first recording can deviate from the original score. See the Uncle meat section at King Kong and the following example.



RDNZL, opening bars (draft version). Source: original score.



RDNZL, opening bars (The lost episodes). Source: original score as above, adapted to the The lost episodes version by KS.

The differences between the two versions are:

- The opening bars 5-12 are two chords in a varying rhythm in the original score. On "The lost episodes", with the first 1972 execution, these opening bars are now an arpeggio chord with harmony fill-in by Ruth Underwood on percussion.
- The whole opening melody in the original score is a sequence of enlarged chords. All chords are 9th chords or bigger, avoiding the minor second, so that they are never getting sharply dissonant. The opening

bars are in D Mixolydian. From bar 13 onwards the scales keep changing per meter. On the "Lost episodes" these chords are reduced to three notes per chord, played via three individual parts. The descant plays the upper notes, whereas the bass guitar plays the lowest notes. The saxophone picks out one of the notes in the middle voices, though not consistently from the same position. Zappa could easily have had George Duke play the notes exactly as notated on keyboard as well, but apparently chose not to do so.

- The score indicates the tempo as fast without a metronome number. There are circumstantial indications that suggest that the opening is played faster than Zappa had in mind at fist. About the whole score is written in 3/4, the tempo going halfway from fast to slow, lyrical. The difference between these two tempos on record is thus big that two meters, 3/8 and 3/4, seem more logical. Secondly the tremolo in bars 29-32 is notated with 32nd notes. That's undoable with the tempo on "The lost episodes".

The notation in 3/4 for the opening theme, with all the dotted notes, may look awkward on paper. Zappa seldom scored out drum parts ("The black page drum solo" is an exception), his meters however indicate how the beats should fall for the drummer: 3/4 in this case. I made some notational mistakes at the beginning for not recognizing this in full, as in "Echidna's arf". From 1974 onwards it gets more to normal 4/4 for the opening bars with an original 3/4 bar becoming one beat. The drummer now beats 4/4. The tempo for bars 13-28 can get sped up this way from 10 seconds (1972) to 6 seconds (from 1974 onwards). Zappa starts counting as "one-one-one-one" on "YCDTOSA vol. II". By not saying "one-two-three-four" you can still notice that the band originally learned it as in 3/4.



Another topic is the element of improvisation. The example above with the opening bars stems from an eight pages "RDNZL" draft version, that I found on internet. The image above shows the first five pages on a small scale. It's all in Zappa's handwriting. The general set up of this version is identical to the 1972 execution (the time indications below follow the "The lost episodes" starting points). It has a lot of bars in it with room for improvisation, where Zappa indicates the environment to improvise in in different ways:

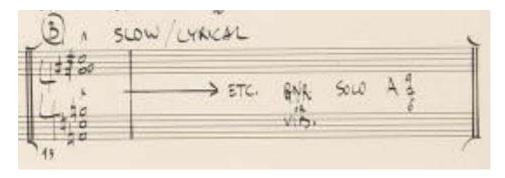
- 0:00, bars 1-4: Drum intro, only the number of bars is indicated.
- 0:02, bars 5-28: Opening melody.
- 0:16, bars 29-88: Violin solo, partly the accompaniment is precisely prescribed, partly only the chord.
- 0:46, bars 89-92: Transitional bars.
- 0:48, bar 93: The tempo goes to slow, lyrical. Bar 93 is notated in 4/4 for a solo of indefinite length, with only the accompanying chord indicated. On "The lost episodes" there's no actual solo, it's just the band vamping for four bars.
- 0:58, bars 94-109: The meter is 3/4 again. Second theme.
- 1:27, bars 110-141: Trombone solo over a chord pattern in the opening tempo. The bass is following a specific type of melody line, that got added during repetitions.
- 1:46, bars 142-173: Four bars of free improvisation by everybody (notated as a cluster of notes) alternate four times with four bars with only the trombone improvising alone, thus with the others pausing.
- 2:04, bars 174-189: The score indicates "Echoflex/modulate quiet weirdness under trombone solo fill". I don't know what Zappa meant with that. On the album you can hear a chord fading out with indeed trombone notes played over it.
- 2:14, bars 190-249: Piano solo over a chord pattern. The chord changes every four bars. On the album

it's performed as standard jazz with a so called walking bass.

- 2:48, bars 250-253: Transitional bars.
- 2:50, bars 254-269: Second violin solo with only the accompanying chord indicated.
- 2:59, bars 270-285: Two bars with melody alternate with two bars of drum soloing.
- 3:08, bars 286-293: Third theme.
- 3:18, bars 294-301: Drum solo over a chord, played as an ongoing arpeggio by the vibes.
- 3:23, bars 302-334: Reprise of the opening melody, half tempo.
- 3:49: End.



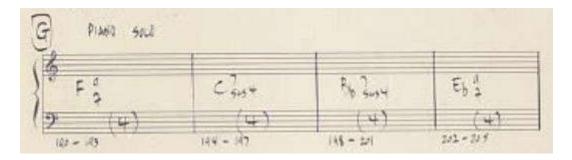
RDNZL, bars 29-32. Source: all examples here are the original score, the following ones in Zappa's own handwriting.



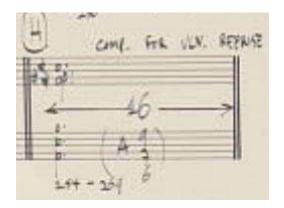
RDNZL, bar 93.



RDNZL, bars 140-145.



RDNZL, bars 190-205.



RDNZL, bars 254-269.

You can't tell, unless you were present at the time of the recordings yourself, in what way Zappa interfered with the improvisations. The transcriptions in this study usually include the improvised element. This is done to avoid the discussion and to be sure that the on-line midi files correspond to the album version the way Zappa wanted it. For a cover band it's a different matter. In the case of "Hot rats", the album version is a collaboration between Zappa and Ian Underwood, with Ian playing various layers over the main themes and chord schemes. When you would reduce a midi file here to what was probably the original draft version, you're leaving out all the grandeur of this album.

FZ:OZ - FZ PLAYS FZ - JOE'S SERIES - PHILLY '76: THE FIVE- AND SIX-PIECE BAND

From the fall tour of 1975 through the winter tour of 1977 Zappa played most of the time with a five piece band. Five was the minimum number of musicians that he deemed necessary for playing his music. Only six pieces with the band in this form have been released by Zappa himself, being four solos and two songs. The majority of live music from this period stems from the concerts Zappa gave at Christmas time, 1976, when he played with an augmented band. So at least in a historical sense you can say that the live recordings showed a gap. The ZFT has more than compensated for this by releasing four albums themselves, namely "FZ:OZ", "Frank Zappa plays the music of Frank Zappa", "Joe's menage" and "Philly '76". The first three cover the months from November 1975 through February 1976. During the summer of 1976 the composition of the band changed, but it remained a five piece band. Till the release of "Philly '76" only the "Conceptual continuity" bootleg from the "Beat the boots" series covered the band in this specific line up. On three occasions Zappa tried to include a female member as a follower up for Ruth Underwood. Norma Jean Bell played sax during some of the 1975 gigs (to be heard on "Joe's menage"). Bianca Odin played keyboards for a month and a half during the fall tour of 1976.

JOE'S CAMOUFLAGE

Viola player Novi Novag can be heard on "Joe's camouflage". This ZFT release contains rehearsal recordings from 1975 with the band still being a 7-member group. Publicity photos were made till Zappa decided it didn't work out good enough and continued with a smaller band. Below an outtake from the CD leaflet with Novi Novag, Terry Bozzio and Denny Walley. "Joe's camouflage" thus contains unique material of a band that never came to be. As a rehearsal recording all tracks would need further editing and development (and some are of poor sound quality). Still the version differences between these very early recordings and the later album releases are of interest. But what makes it really worthwhile is the inclusion of two unreleased tracks, that with some further editing, could belong to Zappa's better work.

Phyniox

"Phyniox" is a beautiful example of a subtle alternation between closely related scales, in this case Ab major and Ab Mixolydian. The example below starts with just the chords from the first block in Ab major. At this point the synthesizer F in the bass indicates F minor, but this F soon gets overruled by the Ab by the bass guitar. The rhythm figure from bar 1, staffs 2-3, is maintained all through. Bars 3-4 contain the bass/guitar vamp from the song. It's using an Ab-Bb-Db-Bb progression, four notes that are part of both the Ab major and Ab Mixolydian scale. The alternation between these two scales is effected by the accompanying chords. The main chords for the major sections are Eb, Fm and Fm7. For the Mixolydian sections it's the Ebm chord. Thus including a switch between G natural and G flat. The scheme is 8 bars in major alternating with 8 bars in Mixolydian (or four times the vamp).

The first example contains the switch from Ab major to Ab Mixolydian in bar 7. The second example includes the last bar from this first Ab Mixolydian block, after which the song returns to Ab major. Yet again this is an example of Zappa mingling two closely related scales, because for his own soloing he follows Ab Lydian during bars 2-5, before he continues in Ab major himself as well. The difference between these two scales, D natural versus D flat, causes dissonances at the beginning of bar 5. This mingling of closely related scales is a common feature in Zappa's music, thus normal that it not only happens in written compositions (like "Echidna's arf (of you)"), but also when Zappa and band members are improvising. So you can have an F major block in a largely F Lydian composition as in the "Sinister footwear III" example in this study. The second "Dickie's such an asshole" example shows band members mingling scales. "Phyniox" can thus also be seen as a refined example of the status scales have in Zappa's music, in this case the three major type scales: these three are used as more or less equal with a preference for Mixolydian. The overview in the Burnt weeny sandwich section illustrates this en masse.





Phyniox (take 1), section #1. Transcription: KS (update June 2014, deposited at the I-depot, The Hague). Note: the vamp during bars 3-6 varies a little.





Phyniox, section #2. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).



Phyniox (take 2), section. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

Other than "Phyniox, take 1", "Phyniox, take 2" contains a coda with the band changing the vamp to a C-Ab-Gb-Eb progression. The chords still continue as before. Thus the scale becomes C Phrygian/Locrian at the end. Specifically the chords from the previous major part, now create dissonances with the closing vamp (F and G versus Gb). Phrygian is a relatively uncommon scale that Zappa uses every once in a while.

Reeny ra

Next are two examples from "Reeny ra". The set-up of this song goes as:

- 0:00 Theme I, played instrumentally (first example below). It's a little theme of one bar, played three times, followed by a closing bar. The meter is 12/16. The key is G Mixolydian. The accompanying chord progression, that you can hear in the background, is I-IV-I-IV-VII-IV-I. The bass ultimately leads to a lower D, as if Zappa would like to end in D Dorian.
- 0:10 Theme I, played twice with vocals. It has no real lyrics. Possibly Zappa was still working on it.
- 0:29 Theme II, mainly a vocal section.
- 0:43 Theme III, an instrumental riff played four times.
- 1:03 Repetitions of theme I as above.
- 1:33 Guitar solo over a vamp. This vamp switches the pedal note from G to B, thus moving over to Locrian, an unusual type of scale that also is rare in Zappa's output. Here it's B Locrian. The only other examples in Locrian in this study are two bars from "Peaches III", a phrase from "Waka/Jawaka" and a progression from "Jumbo go away", that one could interpret as G Locrian. The second example below contains a couple of bars from this section. The bass vamp follows B-C-D-C. The guitar part begins with the G7 chord, followed by a melody that involves altered notes. Every two bars you have a chord progression for the brass: Gm-F-Gm-G (by itself thus more a G minor towards G major movement).



Reeny ra, opening. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).



Reeny ra, section. Transcription: KS (update June 2014, deposited at the I-depot, The Hague).

- 3:45 Repetitions of theme I.
- 4:02 Coda.
- 4:12 End.

Any downers? (1975)

Compared to the later version on "You are what you is", "Any downers?" on "Joe's camouflage can be called the crude version of this song. It's entirely based upon a I-VII progression by the bass in F# minor (Aeolian), over which a VI-VII chord alternation can be heard. The bass notes are part of these chords, but in this study I always let such bass notes determine the key note. In general tonics in Zappa's music get determined by bass pedal notes, rather than by harmonic cadences, and one should better follow one approach only.







Any downers?, 1975, outro. Transcription: KS (update Winter 2017, deposited at the I-depot, The Hague).

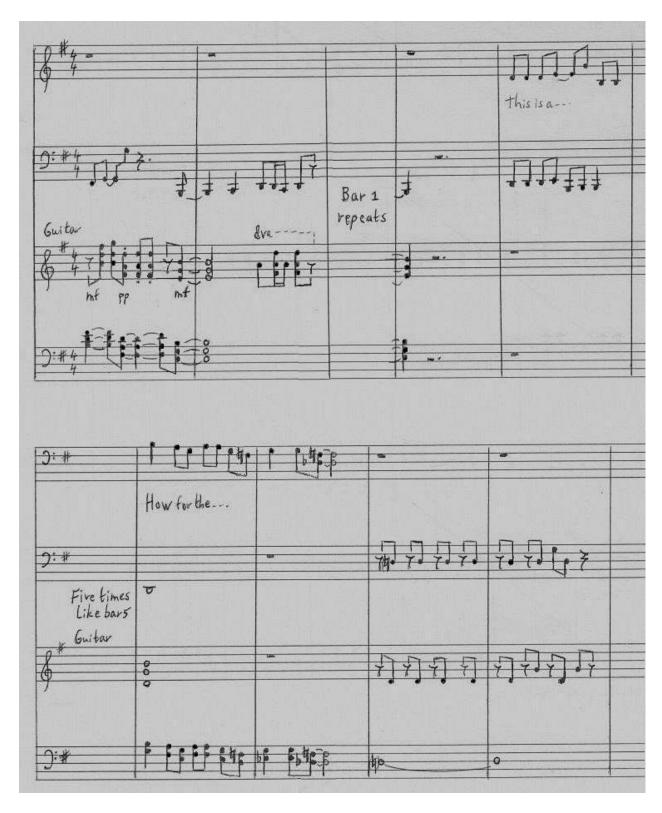
This 1975 version of "Any downers?" lasts six minutes, much longer than the two minutes on "You are what you is". This can be done because the I-VII progression is not only applied to the two themes of this song, but is also used similar to a vamp. A little dialogue can be heard starting with one person asking "are you holding any downers?" and the other replying with "no, I don't have anymore". On "You are what you is" the second theme (with "no, I don't have anymore") has been given a chord progression of its own. Zappa plays little guitar solos during the 1975 version, one halfway and the other as an outro. The example above contains most of this outro. It begins with ticking the F# as 16th notes, followed by the E-chord. During bars 1-2 the keyboard players are still playing the VI-VII alternation in a straightforward manner, but this is getting quite loose for the remainder of this example. In bar 6 of the example the actual soloing begins, while the bass continues with ticking the F# and E. It ends with the keyboard playing the F#m chord, as if the song was to end normally with a chord upon the tonic, but shortly moves over to the D chord again.

FZ:OZ

"FZ:OZ" is the third release compiled by the Zappa Family trust from the tape archive. It's the first done under the Vaulternative Records label and more has appeared since. It contains an about full length concert from 20 January 1976, recorded at the Hordern Pavilion in Sydney, Australia. It's from the period that, apart from Napoleon Murphy Brock, the members of the Roxy and Elsewhere band had left and Zappa was touring with a smaller five member band in different set ups. Because of this most of the virtuoso pieces were left out and Zappa had to play a lot of guitar himself. It changes the character of the concert a bit to a more pop-like form. Zappa was in good shape soloing that night. The difficult pieces could return at the end of 1976 when Zappa assembled a large band that played on the "Zappa in New York" CD.

There's a direct relation between this album and the "Zoot allures" studio album from 1976. About all the songs of the latter album were played live as well and the "Black napkins" en "Zoot allures" solos from this album were developed on the road. This also applies to the "Ship ahoy" solo from "Shut up 'n' play yer guitar", that here appears in a version that is included in the "Zoot allures" track. Also for the "Zoot allures" album Zappa used little personnel and chose to play much guitar, solos as well as the chords.

Kaiser rolls



Kaiser rolls, opening. Transcription: KS (update 2005, 3rd printed edition).

The double CD includes one unreleased song that's completely new, named "Kaiser rolls", that I'm presenting here by its opening. The instrumental opening bars follow the progression Bm-G-D-Em-(D) twice with the transition from bar 1 to 2 being syncopic. The repeated bar 5 and bar 13 set the scale to D Mixolydian.

Two other tracks are to a degree new. An early version of "Let's move to Cleveland" gets titled "Canard toujours". The "Hordern intro" is a combination of the "Naval aviation in art" tape running and concert opening chords.

Personnel on FZ:OZ:

Frank Zappa: guitar, vocals Terry Bozzio: drums, vocals

Napoleon Murphy Brock: tenor sax, vocals

Roy Estrada: bass, vocals Andre Lewis: keyboard, vocals

Keep it greasy

"Keep it greasy" appeared on the setlist in 1976 and got first released on "Joe's garage" in 1979. The main melody remained virtually the same, only some seconds with add-ins are different. The bass part and the harmonies from the 1979 variant have departed a little from the original. Specific for the 1979 version is the inclusion of a guitar solo, played over an articulated vamp in 19/16. The first example below is in D Dorian with the meter being 4/4. The second is in G Dorian in a 19/16 meter as commented upon below.

There's a page about how to learn the drum part of this vamp in Vinnie Colaiuta's site (http://www.drummerworld.com/Drumclinic/vinniecolaiutagreasy.html). In Modern Drummer, November 1982, Vinnie commented:

"There's this one part where the actual time signature is 19/16. The feel is like it is 4/4 with three 16th notes tacked onto the end of it. Then there's another part in 21. It was all one live take; no splices or adds or anything. We just rehearsed it. We used to play it on the road and Frank said, "Okay, we're going to elongate that in the studio and that's going to be a solo. You're just going to vamp out until I give you a cue and then we'll go into something else." And bingo, he gave us a cue and zipp, we were in 19/16. We just cut that track with guitar, bass and drums. I don't recall if there was electric piano in that particular solo section or not. We went to Village Recorders one day and just churned out tune after tune, all live, no edits or anything."

The vamp is played fast in a nervous manner, thus forming a sharp contrast with the following song, "Outside now", that has a much slower sentimental vamp. Because of this the emotions from "Outside now" never come out as outspoken as at the beginning of this song in the "Joe's garage" version. The two examples from above contain the main melody (1976 version from "FZ:OZ" in D Dorian) and the ending of the guitar solo, taken from "Joe's garage" (in G Dorian). After that the vamp plays solo for a while before "Outside now" starts off.



Keep it greasy, opening (1976). Transcription: KS. Update 2010, deposited at the I-depot, The Hague.



Keep it greasy, end of the solo (1979). Transcription: KS (thanks to Vinnie Colaiuta for giving away the biggest difficulty here: the 19/16 meter).

Staffs 2-3 are similar and used for the stereo field, thus one instrument on the right channel and one on the left. Update 2010, deposited at the I-depot, The Hague.

FZ PLAYS FZ

"Frank Zappa plays the music of Frank Zappa", compiled by Dweezil, deals with the three solos, that Zappa considered his signature solos ("Black napkins", "Zoot allures" and "Watermelon in Easter hay"). They are presented in an early state, compared to the final state. All three solos are present in this study. The main theme from "Zoot allures" is being dealt with in the corresponding section. Two versions of "Watermelon in Easter hay" get described in the Joe's garage section.

Black napkins



Black napkins (FZ plays FZ), section. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

In the case of "Black napkins" the oldest version, that could be found, is the one from Ljubijana, Yugoslavia, November 1975. It was a one-time only opportunity to play in Eastern Europe during the communist era, a permission seldom granted to western pop bands at that time. This early solo shows more emphatically than the later ones that "Black napkins" was composed as a two-theme song, at some point maybe even a three-theme song. In this case it wasn't composed on paper, but rehearsed like this by

instructing the band. See his introduction to this song on the ZFT release "Orchestral favorites 40th anniversary". The transcribed section shows contains the tail of the first theme in bars 1-5. Bars 6-9 are transitional ones, four bars being the length of the accompanying bass-keyboard vamp. In bars 10-13 the second theme is introduced, repeated relatively literally in bars 14-17 and bars 18-21. That this is a second pre-arranged theme gets confirmed by the re-entering of the "wee-ooh" accompanying vocals. On the "Zoot allures" version of "Black napkins" this second theme is also present, though in a different and much free-er shape. On "FZ plays FZ" Zappa introduces this song as a tender ballad. Indeed the third theme, played in bars 26-33 of the transcription, is gentle, almost like a lullaby. Again there are four transitional bars between the successive themes. Maybe this theme was part of the original composition, maybe it was improvised on the spot.

The solo from the "Zoot allures" album, played only two months later, is of a different nature. This one is far more intense, to the point of being maniac. Apart from the opening themes the tempo is fast all through. Halfway Zappa is using a sound effect, that Steve Vai identifies as VCF in the Guitar book (I don't know what it stands for). It makes the sound even more frenetic.



Black napkins (Zoot allures), section. Source: Guitar book (transcr. Steve Vai).

Notation for the notes:

Dot: normally picked.Diamond: feedback.

- Crotch: scratched. - Dashed: spewage.

Steve Vai succeeds surprisingly well in getting these bars on paper, using four types of sounds. These are normally picked notes, feedback notes, scratched notes and unspecified higher frequencies, referred to as spewage. "Black napkins" on "Zoot allures" gets a specific outro, not present on "FZ plays FZ". The outro begins with jumping overnight into a different key, something Zappa seldom does (see the Shut up 'n play yer guitar section for the keys used). The solo itself is an alternation of C# Aeolian/Dorian and D Lydian. See my comment at "Pink napkins" for the mingling of Aeolian and Dorian.

In February Zappa gave four concerts in Japan, the only time a tour would include this country. The 1976 version of "Black napkins" was recorded live at Osaka, which explains the presence of Japanese signs on the album cover. Purportedly it's his name in Japanese. Two tracks from the Tokyo concert can be found on "YCDTOSA vol. III", while the "FZ plays FZ" collection contains 15 more minutes from this concert.

JOE'S MENAGE

"Joe's menage" is taken over from a cassette tape that Zappa gave to one of his fans, Ole Lysgaard. It contains 45 minutes from the concert the Mothers gave at the College of William and Mary, November 1975. Ole returned it to Gail Zappa, who decided to release it and give Ole a chance to write the liner notes. The sound quality is something you might expect from a cassette recorder with two mikes, better than a bootleg and less than a professional two-track recorder.

Chunga's revenge (1975)

A curious thing on it is Zappa playing a rhythm guitar solo for three minutes during "Chunga's revenge". It's the only solo on an official CD with him playing in that manner. He would only play rhythm guitar when he was the only guitar player in the band. Otherwise he preferred to hold his guitar only for playing solos. He had problems with singing and playing at the same time. Even the weight of a guitar hanging around his neck already hindered him when singing. Next is a transcription of a section from this solo halfway.

It begins in D Dorian. In bars 3-6 it's calm with only one chord varied rhythmically. In bars 7-12 the solo suddenly starts to drift. It's a sequence of 5th and 7th chords jumping from one scale to another. As a composition it becomes atonal here, specifically if you take into account that the bass continues with playing D pedal.



Chunga's revenge, Rhythm guitar solo, section. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

Note: the notes of the guitar chords in this study are mostly notated in a piano manner. I don't play guitar so an attempt at exact settings for guitar would be futile. It would only get your fingers twirled.

PHILLY '76

For his fall and winter tours of 1976-1977 Zappa assembled a new band, that for most of the concerts again played as a five piece group. For over a month Bianca Odin joined this band. She already had to overcome some shyness in singing Zappa's lyrics, but when some members in the audience started throwing sexist remarks in her face, she decided she had enough of it. There appears to be a bootleg where you can hear her counterattacking with some abusive language herself. It's infantile of these people in the

audience to behave in that way, just as the throwing of objects on stage later on would be. Bianca's vocal range is impressive. She makes a strong contribution in "You didn't try to call me" and "Black napkins" on the "Philly '76" CD by the ZFT. See the Cruising with Ruben and the Jets section for an example. The band on "Philly '76" is:

Frank Zappa: guitar, vocals Ray White: guitar, vocals Terry Bozzio: drums, vocals Eddie Jobson: keyboards, violin Patrick O'Hearn: bass, vocals Bianca Odin: keyboard, vocals

Without Bianca the remaining five people were the core of the "Zappa in New York" band. They were capable of playing technically difficult material. "Manx needs women" on "Philly '76" is a first sign of this aspect. Here it's played in the form of the draft version, as published in Guitar Player, January 1977. The "Zappa in New York" version is faster and has extra lines to it, possibly overdubbed.

City of tiny lites



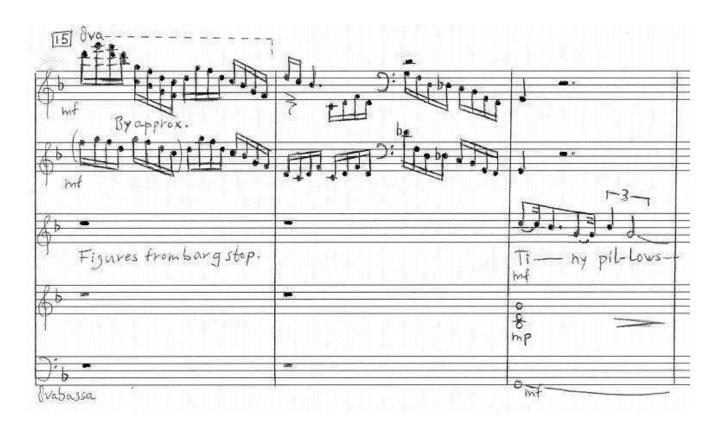
City of tiny lites, section (1976). Transcription: KS.

Update 2010, deposited at the I-depot, The Hague.

Note: the second guitar staff represents some form of rhythm guitar effect, I don't know how it originates.

On "Philly '76" first appear the two oldest songs from "Sheik Yerbouti": "Tryin' to grow a chin" and "City of tiny lites". "Lites" is not (an attempt at) a new word, but a deliberate misspelling of "light" (in the CD booklet of "Sheik Yerbouti" both spellings happen to occur). The first song hardly changed before it premiered on "Sheik Yerbouti". "City of tiny lites" was originally played in straight on beat 4/4 in the key of G Dorian. All later versions have the rhythm more varied, namely with two between-beat notes in bar 2 of the main vamp, being the bass figure in bars 1-2 in both transcriptions.





City of tiny lites, section (1979). Transcription: KS.

Update 2010, deposited at the I-depot, The Hague.

Note: the figure in bars 9 and 17, staff 3, is composed as a triplet. Adrian is taking some liberty here, which I follow.

Distinctive for the "Philly '76" version are the improvised notes by the keyboard and the extra little notes distracted from the rhythm guitar, following upon the main chords. In the second half of the song the imaginary Sanzini Brothers show up again, doing a pyramid trick this time. Without seeing them the music could use an extra here, as indeed is done on "Sheik Yerbouti". The transcribed section from 1978 includes a supplementary theme with fast note strings played on keyboard and vibes. The DVD version on "Baby snakes" was recorded shortly before this one and goes about the same. "City of tiny lites" would turn up two more times in Zappa's catalogue. Both the 1982 and 1988 versions have many extras in them regarding the arrangements. The second half of the 1982 execution is an extravagant example of a mix of written lines and directed improvisation. The 1988 version has a fine contribution by the brass section. They can be respectively found on "YCDTOSA V" and "Make a jazz noise here". Both include a solo by Zappa over the Carlos Santana vamp from "Shut up 'n play yer guitar". These two solos replace the earlier solo by Ray White and the instrumental intermezzo following upon it.

ZOOT ALLURES: HARMONIES - PREFERRED AND UNSTABLE CHORDS?

With his 1976 "Zoot allures" album, Zappa delivered a rock 'n roll album, exaggerating the roughness that's supposed to come along with it by posing as some sort of a creep on the album cover (photos by Gary Heery). The lyrics show the development of Zappa's sense of humour. Provocative as they may be, they can also make you laugh by the eloquence Zappa is uttering himself with. Sentences describing the evil prince in "The torture never stops" can be very poetical, including rhyme, like "he's the best of course of all the worst, some wrong been done, he done it first" (the song is about the (religious) idea of punishing sinners, only revealed at the end). It becomes offensiveness with a smile. "Zoot allures" is a good album to listen to for the use of regular chord progressions.

HARMONIES (BRIEF OVERVIEW)

As in the case of rhythms, it's undoable to present some sort of overview of the harmonies Zappa is using because he would play chords in any way he pleased. The following mentions just some examples of certain directions he can take, ranging from the easiest progressions to the most varied ones. Obviously anything in between will turn up as well. You would have to look through a larger number of individual examples in this study to get a better picture.

Conventional chord progressions:

Conventional is here seen as a series of 5th and 7th chords. In various examples the progressions you can encounter are mentioned in the comment, mostly in Roman numbers, sometimes in rock terms.

- "Doreen", "Joe's garage": songs that are built around I-IV-V, one of the most common progressions. This can be seen as sheer conventionalism.
- "Cheap thrills", "No, no, no": songs that make use of easy repeated progressions, in this case I-IV-I 7th-IV-I
- "You are what you is": a song built over two alternating chords.
- "I ain't got no heart", "You're probably wondering why I'm here", "Jelly roll gum drop", "Bwana dick" etc.: larger progressions, often with modulations. This applies to a large part of the examples in this study.
- "Run home, slow" movie sample #4, "Toad of the short forest", "America drinks", "It's from Kansas" etc.: things can get more and more complex till you get at songs where Zappa keeps changing the scales about all the time.

Unconventional diatonic chord progressions (9th chords and bigger ones):

- "It must be a camel", "Little umbrellas": dense and complex harmonies, achieved by constructing a song by recording in it layers.
- "Twenty small cigars" opening bars, "RDNZL", "Big swifty" piano part: other examples with larger chords.
- "five-five-FIVE": a sequence of 9th chords, led through various scales.
- "Regyptian strut", first example bars 5-7: an example where Zappa harmonizes the same melody in different ways, using dissonants.

Unconventional diatonic chord formations via series of notes:

- "Dwarf nebula", "Music for low budget orchestra", "Friendly little finger" opening bars, "Sleep dirt" accompanying chords, "Punky's whips" 33/32 bar, "Put a motor in yourself" etc.: various forms of 9th and 11th chords.
- "Orange county": both conventional and unconventional chords. In his guitar solos and many composed melodies you can see a total harmonic freedom. Cells with thirds, 5th and 7th chords (with or without the 5th) are passing by just as much as cells with 2-chords, sus4 chords and combinations as D-E-G-A. The 7th often appears in inverted forms as C-D-F or D-F-G.
- "Why Johnny can't read": formation of the 13th chord in the shape of an arpeggio. *Blending of notes and harmonic fields (diatonic)*:
- "Legends of the golden arches", "Regyptian strut, 2nd example", "What will Rumi do?", "The dog breath

variations" (1992): combination of a lead melody in parallels over a vamp, where you're getting all combinations within a scale, almost at will. This effect can also be strongly present in the examples where Zappa is using two meters simultaneously (see the Roxy section).

- "No, no, no" opening bars, "Uncle Meat" bar 1, "Sofa (1975)", "Watermelon in Easter hay" bar 3, "The mammy nuns", "9/8 Objects": in several examples you'll see Zappa mixing as good as all notes of a scale in a very short time span, using a scale as something you might call a harmonic field. Combined with the many strings of 9th and 11th chords as well as the examples with constantly changing scales, bars as these are the clearest expressions of Zappa's attitude towards harmony: I can do whatever I want, not hindered by any system.

Atonal chords and strings:

- "Igor's boogie I and II": chords in atonal works Zappa wrote for his rock band.
- "Manx needs women": specific use of dissonants.
- "Mo 'n Herb's vacation" opening bars, "Sinister footwear I" bars 20-27: chords in atonal works Zappa wrote for orchestras.
- "Drowning witch" fifth example bars 9-11, "I come from nowhere" bar 5: examples of atonal strings of notes, played ultrafast.

Below at "The torture never stops" you'll find some remarks about preferred and to be avoided chords as suggested in other sources.

Many Zappa compositions have a single melodic line as starting point (like the "Florentine Pogen" melody from the One size fits all section). The chords can be derived from such melodic lines by grouping together the notes that are played after each other. Chords in the sense of notes played simultaneously (I call them chord progressions in this site to make a difference) don't have the same prominent role in Zappa's music as in classical music. For that matter Zappa doesn't sound "classic". A bar of Chopin can be full of notes, that, grouped together for their harmony, are often only one or two chords. Zappa's positioning of chords is more direct and the peculiar thing about his choice of harmonies is that it can vary with each performance. I started this study in 2000 and at that time underestimated the role of chords. This is to a point due to the releases by the ZFT, showing versions differences, but more specifically to examples of sheet music that pop up on the net every once in a while. Whereas the album version of "Big swifty" could serve as a good example of a piece being built around a single melody, its piano part score demonstrates exactly the opposite (included in the Waka/Jawaka section). "Zoot Allures" is an example of an album where chord progression stand in the foreground, rather than melodies. The album also includes some keyboard chord progressions, which in this case are played by Zappa himself.

1. Wind up working in a gas station

Regarding chords "Wind up working in a gas station" sounds as a good rock 'n roll song with Zappa playing all guitars, synthesizer and bass. To the right a shot from the album cover photo session with Eddie Jobson (not actually playing on Zoot allures) and Terry Bozzio, who's taking care of the drum parts. There's one lead guitar and two more overdubbed guitar parts. The synthesizer part is sometimes lightly present in the background (staff 4 of bars 3 and 4 of the example below). Regarding its lyrics and rhythm however, this song is puzzling. It's a form of poetry with both the lyrics interfering with the music and the music interfering with the lyrics. Its outlines are:

- 0:00 Little intro with a guitar chord and drumroll.
- -0:05 Theme 1.

The song begins in regular 4/4. Zappa has been looking for sentences with a comparable rhythm, as well as rhyme (though not perfect rhyme). The series "some, from, thumb, dumb" is rhyming, as does the series "decision, position, education". To achieve this effect better, the first sentence got twisted for its grammar. "This is a song that might offend some of you" etc. has become the following, where I'm notating the

words with the accents in capitals and the 4/4 meter as breaks:

THIS is song might of-FEND you some [Instrumental bar]
THAT'S the way it is where I come from [Instrumental bar] If you've
BEEN there too, let me SEE your thumb
[Instrumental bar] Let me
See ...

- 0:21 Theme 2.

"Let me see your thumb", getting repeated over a higher and lower D pedal note by the bass. It's accompanied by a howling feedback C note on the guitar.

- 0:40 Guitar solo.

The example below starts at 0:49, halfway the solo. It's ambiguous about what key it's in, a common factor in Zappa's music. With both F natural and F sharp turning up, it's a mingling of D Dorian and D Mixolydian. During the solo Zappa is sometimes picking notes, but mostly he's letting a string glide between G and A. So G# and quartertones are present just as well. Deliberately letting notes get out of tune is in jazz circles sometime referred to as creating blue notes. In the background you've got two more guitar parts and some synthesizer notes, played in an irregular improvised form. It's difficult to notate this very precisely. Bars 1-4 are by approximation.

- 0:59 Theme 3.

"Show me your thumb that you're really dumb", repeated four times. What's probably meant as "thumbs up" gets shortened to just "thumb" in order to let it rhyme with "dumb". At this point Zappa isn't trying to mold the lyrics towards 4/4. Instead of that the rhythm of the spoken words is dictating the meter. It's a string of 16th and 8th notes, in total 10/16 and subdivided as 3+3+4. The harmony is a harmonic cadance: V-IV-I in C. During bars 9-10 the song evades to step II of C with Dm7. The next chord is B, not overlapping with Dm7 for any note. With many notes being altered, this transition comes out as a pretty drastic modulation. The preceding one from D Mixolydian (at the end of the solo) to C only meant a pedal note switch and one note being altered.

- 1:08 Theme 4.

Again the spoken text is directing the meter and its subdivision. All three sentences are thus formulated that they follow a 17/16 meter:

Bar 11: Hey now, better make a decision

Bar 12: [Instrumental bar] Be a

Bar 13: moron and keep your position

Bar 14: [Instrumental bar] You ought to

Bar 15: know now all your education

Next: [Instrumental bar] Or let me





Wind up working in a gas station, section. Transcription: KS (update Autumn 2016, deposited at the I-depot, The Hague).

The example above ends with bar 15 at 1:16. The three instrumental bars are a variation upon the bars with lyrics with its length being shortened to 15/16. The bass pattern is the most constant element in these bars. Two guitars are playing around the B and Cm chords.

- 1:24 Theme 5.

Till the end the following sentences get repeated by the vocalists, using the same melody for each line:

"Or let me know how you're gonna

Wind up working in a gas station

Pumping the gas every night"

Zoot Allures album:

"Many the camper wants to buy some bite (fish)"

1976 tour:

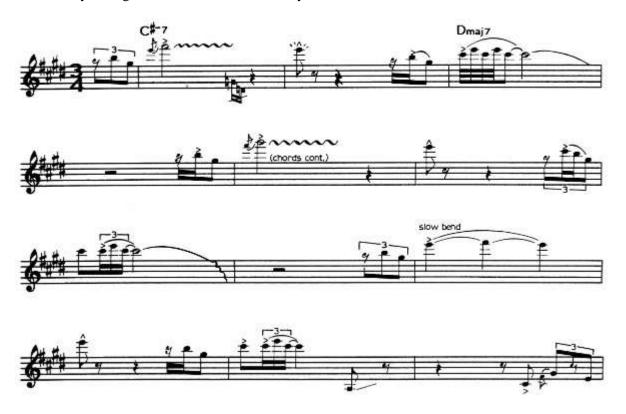
"Many the camper wants to buy some white"

Like the first sentence the last one gets twisted to let it fit better in the rhythm of the melody. It's about camper drivers looking for something to buy at the gas station and the words "bite" and "white" (white gas) are chosen because they rhyme to "night".

- 2:29 End.

2. Black napkins

Next to "The torture never stops", "Black napkins" kept being included in most concert setlists. I'm dealing with two versions in the preceding FZ:OZ section. "Pink napkins" is regarding its meter a variant upon "Black napkins". I'm commenting upon this version in the Shut up 'n play yer guitar section. The pattern in the accompaniment gets indicated, as well as the indecision to play an A or A# over the C# pedal for the various occasions the C#/D schedule is used. It causes a mingling of Aeolian and Dorian with the keys being C# Aeolian/Dorian and D Lydian.



Opening theme from Black napkins as transcribed by Steve Vai (FZ guitar book, page 292). The A in the first bar is a writing error for an F# (as corrected above). See the FZ:OZ section for more, like the positioning of the C#m7 and Dmaj7 chords.

3. The torture never stops

The next examples are Zappa playing the opening and coda of "The torture never stops" on keyboards, bass and guitar (most of the original album guitar part of the coda has been mixed out on the CD rerelease). The opening is built around a bass motif and a I-VII chord progression in G Dorian. The VII

chord can either be seen as an 11th chord or VII 5th mixed with I 5th continuing. The coda is basically regular, but because of the mixed chords on the pedal note and the frequent use of fourths some unconventional flavour is added to it.





The torture never stops, opening. Transcription: KS (update 2006, 3rd printed edition 2007).



The torture never stops, coda. Transcription: KS (1st printed edition, 2000; details renewed in 2014).

The second example is the ending cadence of this song, also in G Dorian, that goes as follows: bar 1 through 4: various chords upon G as pedal note.

bar 5: IV 7th, I 5th plus C.

bar 6: VII 5th, V 5th.

bar 7: I 5th. For a moment it sounds like the melody is ending as a deceptive cadence with IV 5th (G and C), but the bass takes this C as a passing through note for D. So it ends regularly with I 5th, though with the C still sounding in the descant staff.

Bars 1-4 are some of many examples showing that Zappa liked to use any kind of harmonies within a scale. It's a non-standard progression with:

- Gm.
- Gsus2.
- Fsus2.
- Fadd2.
- Fsus2.
- Gm7 (no 3rd).
- Fsus2.
- Gsus4.

In traditional harmony extended chords, including sus2 and sus4-chords, are seen as dissonant, in need for a resolution to a triad. It's quite clear from many examples in my study that Zappa handled these chords as independent chords, like in the one above. Zappa didn't set traditional harmony aside but extended it to being allowed to do anything without an obligation to follow the "rules" you had to learn in harmony classes.

Zappa kept playing "The torture never stops" live, as well returning and extending the original tracks for his "Thing-Fish" CD from 1984. Other versions in this study:

"The torture never stops (1980)": the monumental live version from 1980 with a section going entirely different and several solos.

"The 'torchum' never stops": for "Thing-Fish" Zappa added a block, that he also played live separately as "The evil prince".

"The torture never stops (1988)": another live version with the opening bars beginning somewhat differently from the example above.

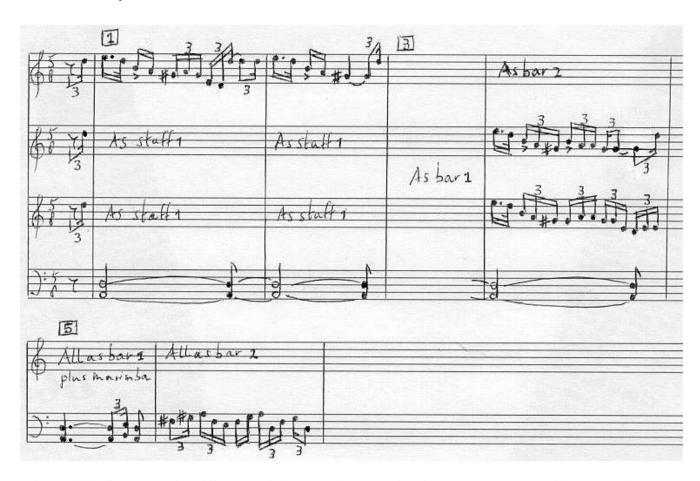
4-5. Ms. Pinky - Find her finer

"Ms. Pinky" and "Find her finer" are the easier pop songs on "Zoot allures". "Ms. Pinky" has only one theme for both the verse and the chorus. Halfway there's a little instrumental section, still using the theme. Like "The torture never stops", the tracks from "Ms. Pinky" got re-used for "Thing-Fish". The song got renamed as "Artificial Rhonda" on the latter CD. Three examples are included in the Thing-Fish section of this study. "Find her finer" knows the standard verse-chorus structure and is built around a bass lick.

6. Friendly little finger

In 1976 the band did a one-time visit to Japan, which explains the Japanese characters on the "Zoot allures" album sleeve. "Black napkins" was recorded live at Osaka, the "Zoot allures" opening from "YCDTOSA III" is taken from the Tokyo concert. Some eastern influences can be found in "Friendly little finger", not only because of the sound of the opening theme, but also by the various melismatic movements in this theme and the bass lines, that accompany the solo. "Friendly little finger" is an extraordinary solo in many aspects. It is best known as an early example on record, where Zappa applied a

technique that he called "xenochrony" (strange synchrony). In the liner notes for "Rubber shirt" from "Sheik Yerbouti" he explains the idea behind it. Xenochrony is laying a recording over another track, that was recorded completely independent of it, followed by a resynchronization. It is thus different from an overdub and different from putting tracks behind each other or lying tracks over each other without adapting them. The resynchronization has the effect of suggesting that the tracks are reacting upon each other. The transcribed solo section indicates this. A hand-made transcription by me is not proof of course, but the two equal beats pointed at with an arrow in bar 3 are clearly audible on the CD at 0:39-0:40. If it wasn't resynchronized, that would be too much of a coincidence. In this case the solo (a dressing room recording without accompaniment) and the drum part are from different occasions. The bass was overdubbed later on after the resynchronization was completed. See the One shot deal section for more about xenochrony.



Friendly little finger, opening riff. Transcription: KS (by approximation, I'm not 100 % positive about the meter and the rhythm).

Update 2008, deposited at the I-depot, The Hague.



Friendly little finger, section. Transcription: KS.

Note: at some points the bass is brightly audible, in other bars it's more a vague D pedal (bars 4-7). Update 2008, deposited at the I-depot, The Hague.

The melody of the opening theme is using unusual harmonies, forming two 11th chords, namely D-E-B-A and G#-A-E-D. The lick is played by various snare and percussion instruments, mostly parallel, sometimes taking some side steps as in bar 4. In bar 6 the bass starts playing its own lines, as it will continue to do during the solo that follows upon the opening theme. At various instances this solo isn't using traditional western scales. In bars 3-5 it applies for instance the sequence C-Eb-F#-G-A-B over D pedal. It sounds unorthodox this way. The solo remains being played over a D-pedal, but the scales change

frequently. In bar 6 the key turns over to D minor (Aeolian), in bar 10 it becomes D Lydian. At the points where the guitar solo is playing sustained notes, as in bars 1-2 and 9, the bass is taking over the soloing. Because it's overdubbed it could do exactly that. Zappa is playing the bass here himself as well and it clearly isn't of the normal accompanying type as during live concerts.

7. Wonderful wino

This song stems from 1970, at first a Jeff Simmons song for a solo album. He played the music to Zappa, saying that he didn't know what lyrics it should have. So Zappa proposed he could write them. Since he wasn't a drinker or a drugs user, he only occasionally wrote songs about this subject, even though its presence in the rock-business was ubiquitous. He liked to write about everything happening in society, but this is something he apparently couldn't relate to easily. "Wino man" is about an alcoholic with Zappa singing it in the I-form, thus himself acting as if he was a wino. Other explicit songs about drugs are "Any downers" and "Cocaine decisions". Like "The torture never stops", "Wino man" has a small but pretty strong guitar solo in it. "Wino man" was also included in the 1971 setlist for his own band and can be found in this way on "Playground psychotics".

8. Zoot allures

The "Zoot allures" guitar solo is made up of four blocks:

a) 0:00-0:38. Opening with a sequence of chords from different scales. Next to the "Zoot allures" execution, you've got other versions on "Does humor belong in music?", "YCDTOSA vol. III" and "Make a jazz noise here". There are two more performances on ZFT releases. All versions follow the same general structure. At a detail level there are many differences, as you can for instance see by comparing the openings from "Zoot allures" (1976) and "Does humor belong in music?" (1984). The main differences, however, lie in the guitar solo (block d), that is getting far more space in the different live versions.





Zoot allures guitar solo, 1976, 0:00 till 0:14. Transcription: KS (update fall 2017, deposited at the I-depot, The Hague).

Note: a few elements could be taken over from Clement (see below).





Zoot allures guitar solo, 1984, 0:00 till 0:14. Transcription: KS (update fall 2017, deposited at the I-depot, The Hague).

Both examples last as long and cover the same, but the 1984 version is actually played faster. This is caused by the chord from bar two being maintained one bar longer in 1984. Bars 6 and 7 respectively contain regular chords, G and Dm7. The chord from bar two has been recognized by Brett Clement as the so-called So What chord, though not as extensively used as he suggests. This chord can be heard on "So what" from the Miles Davies album "Some kind of blue", and has been given a special status in jazz circles. Upon D# it's built as D#-G#-C#-F#-A#, thus three fourths followed by a major third. It's very much a guitar chord, because, upon E, these intervals are the standard tuning of strings 1-5. And by hitting all open strings, you would only be doubling the E, still leaving the So What chord sounding. In bar two from the 1976 version the A# fails, while in bar two from the 1984 version the D# is absent (apart from the melodic D# in the bass line). There are also instances where the chord can be heard to the full. An example is added from the Clement study with 2:32-2:48 from "Does humor belong in music?". As briefly indicated in his example, this gets followed by a pedal note guitar solo in A Mixolydian, instead of the alternation in C# Dorian on "Zoot allures".



Pedal: E Dorian

A Mixolydian

Zoot allures guitar solo, 1984, 2:32 till 2:48. Transcription: B. Clement (page 316 from his 2009 study). See the left menu for the meaning of a Lydian system.

b) 0:38-2:51. Central theme, a chord progression, following a modulation scheme. The next example is the main chord progression from the "Zoot allures" guitar solo (pitch notation as it sounds). The fast key changes are responsible for the solo's harmonic tension.





Zoot allures guitar solo, 0:38 till 1:44. Transcription: KS (1st printed edition 2000, more details added in 2008).

- Bars 1-5. It starts in E with the chords I 5th, I 5th, V 5th plus E continuing, I 5th.
- Bars 6-8: Hereafter it shifts into the V 5th chord of F sharp, with G sharp as the common note with the previous chord. This key change is confirmed by a bass riff.
- Bars 9-16: Repetition.
- Bars 17-21: The solo returns to V 5th of E, followed by several passing through notes from E Minor (or Dorian).
- Bars 22-32: The three chords with their preceding triplets are combining I and V 5th of F sharp, G and A (because of the E pedal for this chord in the example above, this last instance can also be identified as E Mixolydian). This sequence is created by transposing these figures up, first with a minor second, next with a major second.
- c) 2:51-3:06. Return of some of the chords from block a), followed by a transition towards a guitar solo.
- d) 3:06-4:12. Improvised guitar solo over a I-IV alternation in C# Dorian, slowly fading out.

9. Disco boy

On "Disco boy" there's some greasy rock 'n roll playing with thick guitar and synthesizer sounds, like the "doo-dee" block in the middle of the song:



Disco boy, progression played four times between 2:33 and 3:02. Transcription: KS (2nd printed edition, 2001).

This progression, divided over four bars is I-IV-I-IV, IV, I-IV-I-IV and VII-I in B Mixolydian. An overview of the construction of this song can be found in the Ludwig study, page 224. This page contains the lead melody from both the verse and the chorus, while my example above stems from the instrumental bridge. The A sharp in the presets of his transcription must be a writing error: it should be an A natural. At the bottom Ludwig indicates as specific characteristics: bombastic synthesizer sounds, rock 'n roll rhythms and distorted guitars. When you listen in detail to how Zappa created this effect, you can hear that it's carefully planned via overdubbing.

HATEFUL PROGRESSIONS AND THE CHORD BIBLE

a) Hateful progressions.

As it comes to chord progressions, Zappa called the progressions that you had to write down in harmony classes "hateful", especially the ones with the chords of resolution. He indeed liked non-standards chords as sus2 and sus4-chords, as well as extending chords up to the 11th and 13th. The confusing thing about Zappa is that, whenever he claims to dislike something musically, you'll find examples of him doing exactly what he dislikes. The reality about his harmonies is that he followed common paths just as much as he liked to deviate from it. This is already talked about above and other parts in this study. Dissonant chords can, but don't have to resolve, certainly not in Zappa's music. But it's also exaggerated to suggest that they have to in all classical music.

b) The chord bible.

In interviews Zappa has mentioned that he worked with a chord bible for his orchestral works from around 1980. These are the newly written, mostly atonal works for the L.S.O. and Boulez albums. The content of this chord bible hasn't been published, nor is it known for which specific titles he used this set and to what extent it got applied. Attempts to estimate what might be in it have been done by Brett Clement. See his 2009 study in the literature list. Some side remarks have been made by me (you can find a link to a pdf file in the left menu with Brett's response to me), but in general I have no judgment upon this. Anything you say can't be verified, simply because this chord bible is stacked away in the ZFT archives. Some more about this topic is briefly passing by in the L.S.O. section of this study at "Mo 'n Herbs vacation".

PREFERRED AND TO BE AVOIDED CHORDS IN A LYDIAN SYSTEM

Brett Clement has also constructed a table with preferred and prohibited chords for Zappa's instrumental diatonic music. This is the more interesting part of his Lydian theory for here this theory is getting consequences. My study is quite different in this matter in the sense that I don't have such theories and tables. Brett is the first to come up with a theory about Zappa's diatonic instrumental music, and because of that it has been heralded by a number of people as a break-through. It tries to give a musicological explanation why:

- Zappa has a preference for Lydian and Dorian over the other modes.
- Why some chords are characteristic, while others are unstable.
- Why Zappa's music lacks a sense of tragedy.
- Why Zappa is inclined to avoid the tonic in melodies, when playing in Lydian.

These four subjects are interrelated, being a consequence of what he himself describes as Zappa following a Lydian system. Because I'm simply saying that Zappa just did anything in any scale, there doesn't have to be much discussion about the preferred chords. Zappa indeed uses them. It's the prohibitions that are teasing. Brett calls a number of chords unstable or dissonant within his Lydian system. Chords should avoid the inclusion of leading tones from this Lydian system. This means that in Aeolian/minor the triad and the sus2 and sus4 chords upon the tonic are to be avoided. In Dorian this goes for the sus2 chord. Brett doesn't go as far as excluding the triad in Ionian in his table, but his rule says that this chord should be seen as unstable too (for its third). In his article this gets stipulated as some sort of musicological formula, but in his response to me it's more down to earth. He's asking readers to play it and experience the dissonance.

As Brett also notices himself on page 154-5 of his article, his rules do the opposite of traditional harmony:

Like Ionian, the Aeolian mode (Mode V) has weak status within the LS and is rarely encountered in Zappa's characteristic modal textures. To consider why this is the case, we might look to the functional ambiguity of the Aeolian triad (iii) in the Lydian scale: this triad tends to sound like the upper structure of the tonic-seventh chord rather than an inherently stable chord. Additionally, the fifth of Aeolian triad is one of the unstable leading tones of the LS (see Example 6[e]), making the establishment of stable Aeolian modality somewhat

challenged. Such a reading further demonstrates the sharp distinction between the LS and the traditional major/minor system, wherein the Aeolian and Ionian triads are viewed as especially stable. Ramon Fuller, for example, observes that the Ionian and Aeolian tonic triads gain stability due to their avoidance of the tritone interval (i.e., the tendency tones of the major/ minor system). Significantly, if we follow the same logic, the triads that avoid the leading tones of the LS are those of its characteristic major and minor modes: Lydian (I) and Dorian (vi).

Playing triads upon the major and minor tonics is about the most normal thing you can do in Western music. All details of Brett's reasoning can be found in his own study and his response to me (left menu), as well as my objections and examples to the contrary, so this doesn't have to get repeated here. One has to consider the following:

1) Brett is asking you to switch your coordinates of what's consonant and dissonant when listening to Zappa's diatonic instrumental music. In his case one has to experience the rules as presented further below, rules that don't exist in traditional harmony.

- 2) Don't make this switch when listening to his songs (with lyrics).
- 3) A couple of compositions exist in both instrumental versions as with lyrics (e.g. "Let's make the water turn black", "Take your clothes off while you dance", "Dog breath", "Montana" interlude and "Bogus pomp").
- 4) Several compositions contain their themes being played both instrumentally and with lyrics (e.g. "Miss Pinky", "I have been in you" and "Wild love").

Just for conceptual reasons his way of reasoning already raises question marks. Is it humanly possible to redefine one's definition of consonance depending on the context? And only when listening to Zappa (Brett does not claim any other composer follows his Lydian theory). Personally I would say this is not feasible, but you can test it yourself by listening to the examples below. Secondly the status of a range of compositions becomes problematic, the ones that include themes that get played both instrumentally and with lyrics. This situation is thus peculiar, that one might ask if an academic journal should take the risk of publishing it. The editor from Music Theory Spectrum at that time, who approved this writing, is Mark Spicer, professor at the Hunter College, University of N.Y. When I informed him of my objections, this article had passed the submission procedure by long, being peer reviewed and all, and stood in front in the queue for being published. Mark Spicer wrote me the following: "You offer a transcribed example from "The Torture Never Stops" that purportedly shows a sus2 chord on a Dorian tonic. First, the presence of one example (or even many) does not contradict Clement's theory. Second, the sus2 chord in this particular example is easily explained as a G-minor triad with the A being a passing tone from B-flat to G, rather than a self-standing sus2 chord. In other words, the A could be considered not to be part of a sus2 chord but purely a melodic phenomenon."

So noted. Brett has stated his rule of Lydian consonance three times in a row and Mark Spicer wishes to maintain its correctness.

In his 2009 study Brett objects to the presence of the dominant 7th chord in his Lydian system. Its resolving tendencies would challenge the supremacy of the overriding Lydian tonic. In his article he newly formulated a rule against the dominant 7th chord family upon the Mixolydian tonic, the only scale that has these chords upon its tonic, the chords Brett is concentrating upon. These arguments are different, but don't exclude each other. In my reaction I'm addressing myself to both versions, but in his response Brett claims that he only objects to the dominant 7th chord in Mixolydian. Then it does get inconsistent, because that would mean that playing V 7th - I in major would now be ok in his Lydian system, something he objected to in 2009 (see the Burnt weeny sandwich section from this study at "Overture to Holiday in Berlin" for the details).

Although I will comment upon the significance of some of the chords in Example 6, the contents shown are quite predictable when we proceed from the hypothesis that Zappa's chord types should uphold Lydian properties of consonance and dissonance. Two general rules may be formulated, the first regarding cyclic chords and the second pertaining to tertian chords: (1) cyclic chords should generally restrict their pitch content to adjacent segments of the lower pentachord of the Lydian fifthstack (pitches 1-5);31 and (2) tertian chords are subject to a tritone restriction, whereby the interval can only appear with Lydian 1 sounding below 4. Adherence to the first rule, which essentially involves avoidance of the leading tones, allows one to experience cyclic chords as generally stable and therefore not in need of resolution. The second rule is necessary to maintain the melodic trajectories associated with the most stable (1) and the least stable (4) Lydian pitches. That is, 1 should remain melodically inactive, as its stability implies no motion in itself, whereas 4 is strongly suggestive of ascending melodic resolution. Reversing the registral configuration of the tritone, with 1 above 4, would activate 1 as a dissonant pitch in need of downward resolution.

Previous page: Brett Clement. A new Lydian theory for Frank Zappa's modal music, page 152. The two rules that define consonance/dissonance in a Lydian system.



EXAMPLE 6. Modal pitch structures within the Lydian system,

Table A. Brett Clement. A new Lydian theory for Frank Zappa's modal music, page 151. The preferred chords of a Lydian system.

Full triadic extensions are only found in Lydian and Dorian, which is why only those modes have the full stack of thirds shown. Other modes violate the "tritone restriction" when thirds are stacked upon the tonic.

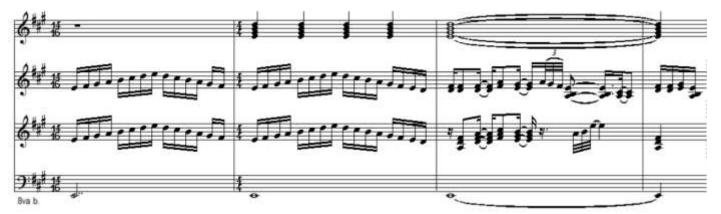
Brett Clement. Response to Kasper Sloots, page 97. This further explains the stacking of thirds in the table above. The tritone restriction means that, in case of F being the overall tonic of the Lydian system, this F can't be played on top of B. The then created tritone dissonance would leave the F in need of a resolution, undermining its stable function in the Lydian system. In the Ionian table the F is left out, in the Mixolydian

table the stacking of thirds comes to a halt when reaching the F. In the Aeolion table the first rule already creates a problem at the triad (the ? with LT standing for lead tone).

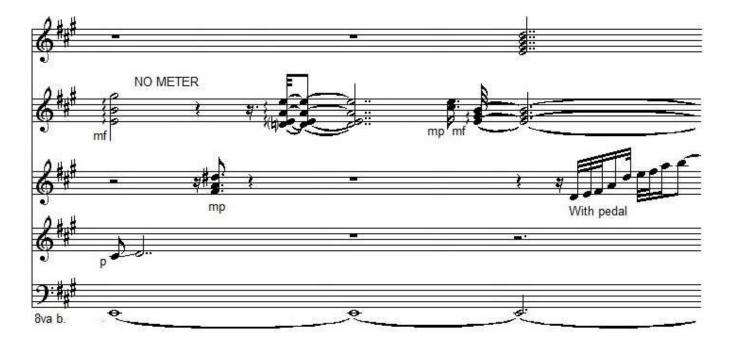
THE DOMINANT 7TH

In my opinion Zappa's music is not about prohibitions and exclusions. His desire for harmonic freedom is total and examples as above scream for it. They are not untypical of Zappa, it's what Zappa is about. Readers are encouraged to do an experiment: (1) Play/listen to the two immediately preceding examples (from Yo Mama, Why Johnny Can't Read), which are indeed in the Mixolydian mode; then, (2) play a full E-Mm7 chord on an instrument of your choice. What do you notice? It just sounds wrong: plain and simple.

Brett Clement. Response to Kasper Sloots, page 106 (blue is me, red is Brett).



Yo' mama, Sheik Yerbouti, excerpt from the bridge.



Yo' mama, Chicago '78, excerpt #1 from the solo.



Yo' mama, Chicago '78, excerpt #2 from the solo.

The first example is the one Brett is referring to, the other two are from the "Yo' Mama" solo from "Chicago '78". They have in common that the overall harmony is often E11. When it sounds ok with E11, it automatically sounds ok with E7 too, at least to my ears. In his response Brett is saying things like that the first example isn't really E11 but a D-chord on top of an E-chord. But it's always possible to split larger chords: E11 is identical to a D triad on top of an E triad. For the overall sound this is irrelevant, certainly when you're talking about consonances and dissonances. The total you're hearing is E11, no matter how you call it. In the above examples an explicit E7 chord is added as an extra sustained chord, the experiment Brett is asking you to do. It doesn't sound awkward to me at all.

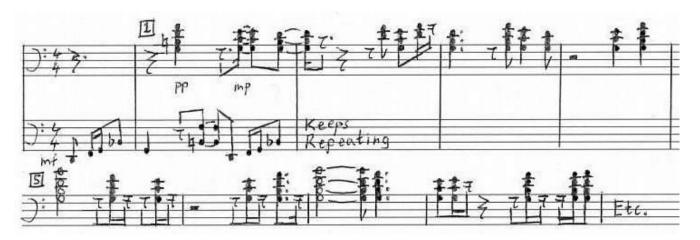
Examples of Zappa using Mm7:



Exercise #4 (1973), opening bar. This example stems from Road tapes, venue #2, not yet released at the time Brett wrote his response.



Call any vegetable (1971), opening of the solo. The A7 chord upon an A pedal is strongly present. This solo begins in A Mixolydian with a C# dominating, soon to move over to A Dorian with a C natural.



The Gumbo variations, opening. In his response Brett writes about the Gumbo variations: "this is simply the blues scale in G, not clearly Dorian or Mixolydian". I agree that this song is mingling Dorian and Mixolydian. The intro from above obviously has the accent upon Mixolydian, the only scale that supports a Mm7 upon its tonic. Also Andy Aledort is indicating G7 in the Hot rats guitar book.



Promiscuous, opening. Here an open tritone is used (staves 2 and 3: F#-C), making the overall D7 chord sound more dissonant than usual.

Some examples by others:

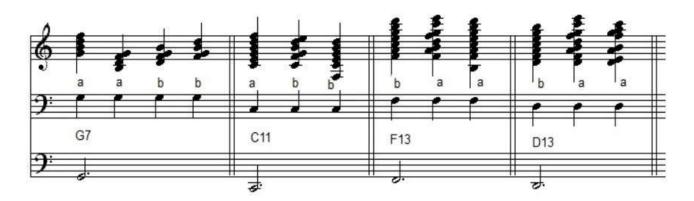
- Zappa's own handwritten "Arabesque" score is an early example of him being pretty versatile as it comes to keys and chords. In notations like this the root of a chord is also to be taken as the bass note. The Mm7 returns a couple of times (extended with a major 9th). Chromatic notes are also occurring. See the Projects section from this study, where you can also hear how it sounds. In bar 6 from my 2nd example both the melody and chord are following G Mixolydian.
- "Fifty-fifty", pages 43-51 from the Overnite sensation guitar book, transcribed by Paul Pappas. Three examples are also present in my Overnite sensation section. It follows a modulation schedule, using the Mixolydian mode as the central mode. I agree with Brett that it's far away from purely Mixolydian, but the pattern can be discerned and there are sufficient bars using the Mixolydian mode as basis.
- "Stink-foot", page 83 from the Apostrophe guitar book, with Andy Aledort indicating C7 for the opening of the guitar solo. This is not pentatonic blues, as Brett suggests in his response, only blues-like if you wish, using the full Mixolydian scale. This topic is getting dealt with at large in my Burnt weeny sandwich section and my Imaginary diseases section at "Been to Kansas city in A minor". The only thing I can agree with is that at several other points during this solo, Zappa is also using the Eb from C Dorian.
- "Can't afford no shoes", pages 46-7 from the One size fits all guitar book, transcribed by Addi Booth. Idem.
- During the first solo from "D.C. Boogie", Tony Duran repeatedly plays a F#-5 chord over a D pedal. Apparently he didn't consider D7 a harmony one should avoid when playing with Zappa.

In traditional harmony, the dominant 7th chord is seen as dissonant, as well as a tritone. G7 resolving to C is the archetype example of a resolving progression. But it's also a normal chord in traditional harmony, certainly not one that should be avoided. It's not even a rule that it must resolve.

Brett does use the word prohibited on page 131 of his 2009 study. Moreover he's using his tritone restriction for impeding the stacking of thirds to the full in Ionian, Mixolydian and Aeolian. Wouldn't that be odd for someone who claimed that he loved extending chords to the 11th? In a very abstract way I can understand how Brett is reasoning, but in a practical sense it's a no. The above examples sound perfectly normal to me. And if you find they don't, shouldn't then Zappa have instructed his band by saying something like "please don't play note #7 on top of #3 when we're in the Mixolydian mode, that destabilizes the overall Lydian tonic of my instrumental music".

I think you get the point. There is some shockingly bad analysis in the section above. If Sloots's intention is to show that Zappa uses the Mm7 chord in the Mixolydian mode, he has failed miserably.

Previous page: Brett Clement. Response to Kasper Sloots, page 109. I'm citing this to stress the importance it has to Brett to abide to the rules of a Lydian system. As said, in this response I'm reacting to both his 2009 and 2014 writings. If you concentrate on his 2014 writing only, a number of examples of Mm7 would indeed fall off. On the other hand the Mm7 chord in Mixolydian is not the only chord that can violate his tritone restriction. And, as you can read in the Roxy and elsewhere section at "Son of Orange County", he would like to extend its significance to melodies too.



Systematic adherence to the tritone restriction would, in my opinion, lead to another table and conclusions than above. All chords know inversions and different ways of voicings. In 2009 Brett talked about a general problem with the Mm7 chord in his Lydian system, in 2014 he newly introduced his tritone restriction. Strictly speaking that would mean that two of the three inversions of the G7 chord in Mixolydian would not violate the tritone restriction (above position a is violating the tritone restriction, b isn't). On the other hand F13 in Lydian and D13 in Dorian can be voiced/inverted so that they do violate the tritone restriction. A few voicings are shown above, where I've avoided the minor second (all chords therefore aren't sharply dissonant).

One has to realize that when people are talking about chords in its standard meaning, it includes all inversions and voicings. Zappa often notates his harmonies by the chord type only, which, in a number of situations, would mean that you can either play it with or without a tritone violation. This, of course, isn't an issue when this doesn't bother someone.

TRIADS AND SUS-CHORDS IN AEOLIAN AND DORIAN

certainly does not. Though I can understand what Clement says, I find it difficult to take this serious. First, was Zappa the type to avoid lead tones and dissonants? In certain contexts: yes, particularly if he is attempting to create stable modal harmonic climates. Secondly, we're here not talking about audible Lydian lead tones or a dissonance, but an imaginary one: the Lydian scale or tonic is not actually played. Nobody before Clement has ever suggested that the Lydian scale is leading in Zappa's music. Then should everybody in some way subconsciously have realized that one shouldn't play a sus2 chord on the Dorian tonic, because one of its notes would create a dissonance with a corresponding Lydian tonic? Go over to an instrument of your choice, set up the Dorian scale, then play a Dorian sus2. What do you hear?: a dissonant chord. Do the same on Lydian and Mixolydian and you will not experience the same dissonance. This is because as the sus2 chords on these modes avoid the leading tones. In traditional tonal theory, all sus 2 chords would function as dissonances. This is partly what is interesting about Zappa's use of them: they occur within a tonal system where many can function as consonances. That's highly unlikely. I only hear dissonances when they are actually played. And I only experience

Brett Clement. Response to Kasper Sloots, page 113 (blue is me, red is Brett). His choice of words around "instrument of your choice" is peculiar. Logically that would mean one could test his first rule for Aeolian too in this manner and that it applies to music in general. Let's assume this is a slip of the tongue and that he means in the context of Zappa's instrumental music.

Examples of Zappa using the triad and suspended chords upon the Aeolian and Dorian tonic:



Outrage at Valdez, bars 1-3. The first chord of this composition is Fsus2 in F Aeolian, voiced as F-C-G.



Pygmy twylyte (A token of his extreme), solo section (transcription). Here the other two type of chords Brett considers unstable in Aeolian can be heard (Bm and Bsus4).



The idiot bastard son, intro from the YCDTOSA II version. Bars 2 and 5 feature the Dsus2 chord in a D Dorian environment.



Previous page: Sheik Yerbouti tango, bars 9-12, with the Fm-chord in an F Aeolian environment.



Theme one from Peaches III. Bars 1 and 5 feature the Bm-, Bsus2-and Bsus4-chords in a B Aeolian environment.

Regarding the first example, Brett doesn't really deny it's an example to the contrary, just calling it flawed (Response to Kasper Sloots, page 123). Regarding the second one neither. Instead he writes: "I won't bother to respond here. Since this is improvisation by George Duke, and therefore not composed by Zappa, it doesn't apply to the conversation". It is improvised accompanying Zappa, landing on an official album, but how can that affect how it sounds? How can it sound unstable if Zappa would have put it on paper, and normal when George is playing the same on keyboard, like Brett is suggesting himself ... "instrument of your choice". The least Zappa could then have done is instruct his band by saying something like "don't play a triad, sus2- or sus4-chord upon the tonic when we're in Aeolion, that creates a dissonance with the overall tonic of my instrumental music". As it comes to the third example Brett does deny it's in D Dorian. Instead he claims it's in A Dorian with the F in the sus2 progression being a nonscale note. I agree that it's possible to reason like that for theme 1 of this song (where the sus2 sequence moves over to an A pedal), but certainly not for the intro. Check it yourself, bars 2-5 follow D Dorian and they don't move over to an A pedal, but a chromatic passage. Ruth Underwood plays the sus2 sequence separately on the Classic albums series as sounding typical of Zappa (see the YCDTOSA vol. II section of this study for the details). Then you want people to hear it as in A Dorian with the F being an altered note? Regarding the Sheik Yerbouti tango and Peaches III, Brett doesn't deny that these examples can be interpreted as examples to the contrary. In this case he's arguing that these two examples don't count for not following the pitch structures of a Lydian system. Kind of vague and arguable (it's instrumental, the area Brett wrote is his Lydian theory for, it's not a parody, it's not typical "functional harmony" ...). If you would allow it to be discussed, would then an outcome of a discussion determine if you're hearing it as consonant or not? Personally I'm calling something consonant or dissonant, independent of the name somebody wants to give to the bars where they occur.

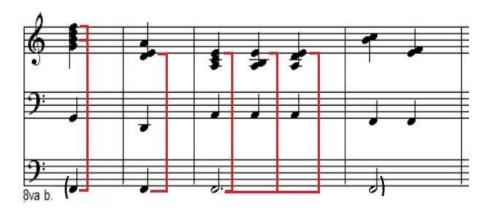
Brett himself claims that he only encountered one example to the contrary, the citation below from page 152 of his 2014 article. Pitches 5-7 from stacking 5ths in A Lydian are C#-G#-D#, voiced as a C#sus2 on "Waka/Jawaka". This example is present in my study (see the Waka/Jawaka section).

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.

In case of Lydian, and Lydian only, the overall Lydian tonic of Brett's Lydian systems can actually be heard. In this case you can hear the G#-A dissonance (the G# from the chord and the A by the bass). Still it's not as striking a dissonant accompanying chord as D#-E-G#-A would be, an incomplete 13th chord, with both minor seconds from the Lydian scale in it. While Brett is concentrating upon chords upon the tonic, one might reason his rules can also be applied to the corresponding scale steps from the other modes. Brett himself is here opening this door by presenting a sus2-chord in Lydian upon step 3 of this scale, which is the main reason I'm pointing at this remark. Similarly his rules can be applied to other chords too, the triad and sus4-chord upon step 3 in Lydian should be heard as unstable too, as well as the sus2-chord upon step 6. Likewise this can be done for the other scales. This brings us back to the Mm7 chord. In his 2009 study he seems to object to the Mm7 chord not only upon the Mixolydian tonic, but in general, presenting the Mm7 upon step 5 in Ionian as not belonging to a Lydian system. In his response to me, however, he states that he objects Mm7 in Mixolydian only. Aren't we then reasoning in a circle? Again: Brett himself has opened this door.

As said, on a very abstract level it's possible to follow Brett's reasoning. Basically it needs two requirements from the listener, when listening to Zappa's instrumental diatonic music:

- You always have to be aware what the overall tonic of the Lydian system is (staff 3 below).
- Forms of dissonances with this overall tonic should bother you for destabilizing the Lydian system (chords 1-5 below).



- Chord 1: the upper note of the tritone from this G7 chord is the overall Lydian tonic F from staff 3, violating Brett's tritone restriction.
- Chords 2-5: the E in these Dorian and Aeolian chords creates a dissonance with the overall Lydian tonic F. As long as this Lydian tonic isn't actually played, I'm not hearing it. When forcing yourself hearing it, by playing staff 3 too, wouldn't that create an inconsistency? Wouldn't the key then not become Lydian by definition?
- Chords 6-7: chords in Lydian, incomplete F11 and Fmaj7 chords. That is what in particular sounds dissonant to me, audible minor seconds.

Brett's Lydian theory is what sometimes has been called an "academic" theory, a theory that you can construct in your mind, but that can't function in reality. So far I'm the only one who has questioned it in print (pdf-file, article or book). Charles Ulrich and Chanan Hanspal have given their full-hearted support

of this theory, both after a discussion about it had arisen, so there are people who find Brett's way of reasoning persuasive.

Something one has to realize is that the Lydian theory can't live without Brett's rules of consonance/dissonance. Without them it can't explain anymore what it wants to explain. It would become an empty shell. If there weren't any rules, Brett's example 6 from above would come to look as:



Table B. The stacking of thirds and positioning of sus-chords (incl. inversions) upon tonics. This isn't a Sloots theory, a revised LCC theory, a revised Lydian theory or whatever. This is common knowledge. And this is how Zappa is actually using these chords.

In case you would reduce Brett's theory to something as meaningless as that he has shown the importance of pedal notes and sus-chords in Zappa's music, you can immediately see that there would be no musicological reason why Zappa would prefer Lydian and Dorian over Mixolydian, Ionian and Aeolian, the thing Brett wanted to explain.

Martin Herraiz wrote his study before Brett's Response was made available. Martin writes:

Podemos concluir dizendo que, apesar de a teoria Lídia de Clement fornecer, como o próximo capítulo deve evidenciar, uma importante base metodológica para o estudo de qualquer obra diatônica de Zappa, especialmente no que diz respeito à hierarquia entre os diversos modos e ao tratamento do ciclo de quintas e dos acordes "sus", um estudo aprofundado das exceções às "regras" postuladas por Clement pode acabar por se mostrar tão vasto e extenso quanto o do próprio autor. Visto que este está longe de ser o objetivo do presente trabalho, um breve estudo de caso deverá bastar para ilustrar este ponto. O exemplo 2.13 contém uma redução de três excertos da peça "Rollo", transcritos a partir da gravação ao vivo de 1972 editada no CD *Imaginary Diseases* (lançado em 2005)¹²⁹; uma versão de 1975,

About which I'm saying (in blue) and Brett (in red):

¹²⁷ Ver seção 3.1.

¹²⁸ Ver seção 3.2.

¹²⁹ Não é possível calcular a numeração precisa de compassos neste caso, já que esta gravação é editada a partir de uma performance muito mais longa; ao invés disso, o exemplo reproduz apenas a minutagem referente a cada excerto na faixa 2 do referido CD.

In English: "We can conclude by saying that, although the Lydian theory of Clement provides, as the next chapter should highlight, an important methodological basis for the study of any of Zappa's diatonic works, especially regarding the hierarchy between the various modes and processing cycle of fifths and two "sus" chords, a detailed study of the exceptions to the 'rules' postulated by Clement may ultimately prove to be as vast and extensive as his own work."

It's up to this author to use terms by Clement to identify something as a Lydian system. Scientifically this situation is a bit awkward. If one truly believes that examples to the contrary may be just as many as examples in favor of something, one should find this theory refutable and better refrain from re- using it. Of course one doesn't need a Lydian theory to identify modes as pedal substitutions for each other or to position sus chords. In case Gsus4 happens in G Mixolydian, I, and everybody before Clement, call it Gsus4 in G Mixolydian (just like that) and not Lydian system F. The interest of my Lydian theory is not found in the labeling, but in what it tells us about Zappa's views of consonance/dissonance, chord-scale interaction, modal interaction, form, etc.

To me this doesn't make sense. How many examples to the contrary does one need to reject Brett's theory? Moreover Brett is giving a musicological reason why some chords should be avoided. Then it's not about how many examples to the contrary might be encountered, but how they sound. Even I am not suggesting there might be just as many as there are in favour. What I am saying that these chords sound perfectly normal in the context of Zappa. The second argument is strange too. Is Martin here suggesting that someone better needs table A instead of table B for relating modes and sus-chords? Or that people before Brett had problems with relating scales and sus-chords, table B not being common knowledge? I know that sounds silly, but what else could it mean? The only real difference between table A and table B is that Brett calls a number of chords dissonant or destabilizing in his Lydian system.



Martin, "yetanother", is here trying to throw with some mud (screenshot from the Zappateers site). Between the lines you can notice an argument fails. The actual reason why people as Martin are so eager to associate themselves with Brett's theory can only be its suggestive nature. It's all written in a highly-educated form, way more complex as I or Wolgang Ludwig are describing examples. It gives people the idea that something at a higher musicological level is happening, a point where you can get at conclusions other people couldn't come up with. And you indeed have people who can't accept the idea that a composer ever set out to compose without any system. You indeed have people like Mike Pierry who start

cheering when Brett found out that Zappa used a system after all:

practices of repertoires that privilege harmonic stasis and textural stratification. That said, though Zappa's music is certainly influenced by many trends in twentieth-century music, Zappa was keen on developing his own original approaches to composition. Thus, the Lydian-based approach described here, which treats Lydian as tonic while allowing for a highly codified, limited treatment of additional diatonic modes, represents Zappa's original solution to composing with the diatonic scale.

This situation has spoiled a lot. With reputations involved you know a number of people will do anything rather than admit mistakes. It might take years, maybe decades, before this normalizes. I'm just to first to have overtly questioned Brett's Lydian theory.

INTERVALS IN DIATONIC COMPOSITIONS

Since chords can also be formed by a group of notes from a melody (broken chords), the use of intervals is to a point related to harmonies. This subject hasn't been specifically investigated by me, but it does get dealt with in the Ludwig study (pages 127-132). He has put the number of occurrences of intervals in a table, that I would like to reproduce here. It takes an awful lot of time to set this up. In my study there are over 500 examples, while you've got the Frank Zappa Guitar book and the Hal Leonard series at your disposal just as well. So I'm rather assuming that the Ludwig table is representative for Zappa's composed diatonic music.

6.) Tabellarische Übersicht zur Intervallhäufigkeit 4 (zu Kapitel 4.3.1)

Intervali ⁶	Melodien und Riffbildungen		Breaks, instrumental. Zwischenspiele ⁵		Summe	
	Anzahl von	in % 694	Anzahl von	l in % 134	Anzahl von l	in % 828
kleine Terz	168	24	23	17	191	23
große Terz	91	13	16	12	107	13
Quarte	198	29	49	37	247	30
Tritonus	21	3	3	2 6	24	3
Quinte	106	15	- 8	6	114	14
kleine Sexte	20	3	6	4	26	3
große Sexte	32	5	3	2	35	4
kleine Septime	20	3	7	5	27	3
große Dezime	13	2	13	10	26	3
Oktave	17	2	1421	2	17	2
kleine None	2	0,3	3	2	5	1
große None	4	1	2	1	6	1
■ Dezime	2	0,3	1	1	3	0,4

- Der Untersuchung der Intervallhäufigkeit liegen folgende Quellen zugrunde: Zappa: Songbook, a.a.O. und die selbsterstellten Transkriptionen, S. 218-259. Berücksichtigt wurden nur die jeweilige Hauptstimme eines Stücks oder markante Riffbildungen. Kriterien für die Intervallzählung: harmonische Wechselnoten zählen nur einfach, das nachschlagende Doppeln von Melodietönen (wie z.B. beim Vibraphonspiel), Wiederholungen von Motiven, Phrasen, Riff- sowie Sequenzbildungen und gebrochene Akkorde (Drei- und Vierklänge mit Terzschichtung) wurden nicht gezählt.
- 5 Breaks und Instrumentale Zwischenspiele meist schneil gespielte Folgen von gleich langen T\u00f6nen wurden getrennt gez\u00e4hit, da sich hier eine abweichende Intervallh\u00e4ufigkeit zeigte (z.B. h\u00f6herer prozentualer Anteil von Quarten und gro\u00dfen Septimen verglichen mit dem prozentualen Anteil der gleichen Intervalle bei Melodien bzw. Riffbildungen).
- Intervalle, die weniger als drei Halbtonschritte umfassen, wurden bei der Zählung nicht berücksichtigt, da im aligemeinen ihr Anteil bei der melodischen Gestaltung eine Ausnahme bildet die Dodekaphonie ohnehin den Anteil der anderen intervalle bei weitem übersteigt.

 Der Einfachheit halber wurde in jeder intervallspalte nur eine intervallbezeichnung angegeben. So zählt z.B. zur Spalte "große Terz" auch die verminderte Quarte oder zur Spalte "kleine Sexte" auch die übermäßige Quinte; alle intervalle mit dem gleichen Umfang von Halbtonschritten wurden also zusammengefaßt.

Occurrence of intervals. Ludwig study, page 233.

This outcome concerns the lead melodies from the Frank Zappa songbook vol. I and the transcriptions in his own study (pages 218-259). The titles are mentioned in the scores section from the left menu of this site. It's almost solely diatonic music, so no conclusions can be made about intervals in Zappa's atonal music. The same goes for the guitar solos.

Minor and major seconds have been left out of the scope. Here Ludwig comments that they by far exceed the other intervals, as usual in most music. Minor and major thirds are the next most common intervals in Western music, so it might be expected that they also occur frequently in Zappa's output. What you can see happening is that all intervals within an octave are relatively common in his music. His fondness of fourths and, to a lesser degree, fifths, can be recognized in this table. This subject is also coming by in my study in the Uncle meat (title song), Jazz from hell and Civilization phaze III sections. Interval jumps over an octave are rare in both Zappa's music and music in general. An instance of a very large interval jump, a 12th, can be found in the "Who are the brain police (1970)" examples from the Quaudiophiliac and Carnegie Hall sections from my study. A 10th can be heard in bars 5-6 from my "Would you like a snack?" example.

Nicolas Slonimsky

Tritone Progression

Equal Division of One Octave into Two Parts



Thesaurus of scales and melodic patterns, scales 1-3 from page 1. Pages i-viii are the introduction and explanation of terms.

In 1947 the conductor and composer Nicolas Slonimsky published his "Thesaurus of scales and melodic patterns". This book explores the possibilities to form scales in a rather abstract and systematic manner. It goes ways beyond harmony books, that usually mention the seven diatonic scales and concentrate upon major and minor. Hundreds of scales get constructed. This open approach must have appealed to Zappa, who contacted Slonimsky in 1981 and invited him to perform some piano pieces during his 1981 tour. They became friends. The photo to the right comes from the http://www.slonimsky.net site. The example included below is the start of the list. It begins by stacking equal intervals till you get back at the initial note, one or more octaves higher. The octave can by subdivided as two tritones, three major thirds, four minor thirds, six major seconds and twelve minor seconds. Three minor sixths form two octaves etc. Additional notes are brought in by for instance transposing the original notes with a minor second, major second and a major third. In the example below the stacked tritones C-F#-C are the initial scale. Scale one has these notes plus their transpositions with a minor second etc. The chords to the right are

harmonizations with major triads, while the encircled numbers refer to dominant 7th chords, included at the end of the book.

Slominsky is one of the persons who got interviewed for the Zappa! issue of Keyboard and Guitar player (cover to the left). About Zappa's music he's saying: "It has been my luck to see the emergence of this totally new type of music created out of the recombination of dissonances between two tones, which are intervals, and a variety of separate tonalities which are combined in various ways - that's the best definition I can give. It doesn't contain quartertones or small intervals. Zappa sticks to 12 different notes and 11 intervals. What he does with them in terms of organization is what is so far, far from traditional approaches. That's the secret of his greatness. But, of course, he is very careful. He doesn't just throw things together without any order or without a plan of what to do next. He's somebody completely new and completely different. Zappa sticks to the classical type of music. He is a classicist and a contructionist [...]. Zappa puts musical sounds together and creates something new but not destructive of scales and intervals."

I guess this is more about "Drowning witch" than about "Bobby brown" as it comes to something completely new. Slominsky's right about Zappa not being the intellectual type of avant-garde composer. What he didn't do was:

- come up with a composing method of his own, write musical theories or try to establish a school.
- design new musical instruments himself or try to mutate existing ones.
- come up with deviant chords and scales typical for his music, or compose with for instance quartertones. Slominsky's is also right in saying that Zappa's basis could be called classical:
- 4/4 is the most common meter in his music.
- triads and 7th chords are the most common chords.
- most bars don't contain irregular groupings.

The introduction of the Thesaurus ends with Slominsky citing John Stuart Mill: "I was seriously tormented by the thought of the exhaustibility of musical combinations. The octave exists only of five tones and two semitones, which can be put together in only a limited number of ways of which but a small proportion are beautiful: most of these, it seemed to me, must have been already discovered, and there could not be room for a long succession of Mozarts and Webers to strike out, as these have done, entirely new surpassing rich veins of musical beauty." Slominsky continues by saying: "The fears of John Stuart Mill are unjustified. There are 479,001,600 possible combinations of the 12 tones of the chromatic scale. With rhythmic variety added to the unbounded universe of melodic patterns, there is no likelihood that new music will die of internal starvation in the next 1000 years."

Rhythmic variations in music are unlimited and the note system supports any rhythm for its n:m notation, the possibility of tuplets within tuplets and to make tempo changes absolute by metronome numbers. Zappa fully took advantage of this, briefly summarized in the Roxy and elsewhere section of this study. He could do anything, but stayed within the following two boundaries:

- in case of sheet music, humans should be able to perform it.
- irregular rhythmic groupings should be functional.

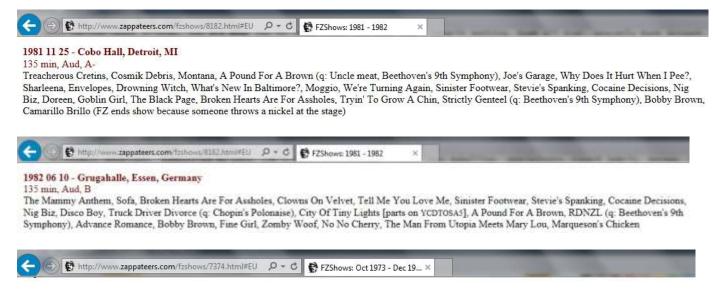
The latter means that for instance you won't find a 21:27 figure is his music. For the human ear such a relationship is too odd to be consciously experienced. But 21:16 within a 4/4 environment is viable. The subject of the number of possible chords has been investigated by some mathematicians, of which I'm reproducing the results in chapter V of my discussion with Brett Clement (see the left menu). The number of 479,001,600 Slominsky is giving here is 12! or 12*11*10*9*8*7*6*5*4*3*2*1, but one could consider if one shouldn't better look at chord types by excluding inversions and transpositions. Than the number still remains large, but more overseeable. I could use the outcome of the intervals table by Ludwig above, but categorizing chords in Zappa's music is in my opinion undoable. One shouldn't only look at for instance keyboard or guitar chords by themselves (as songbooks normally do). The only neutral way is to take a full vertical cross section of everything you hear as is also done in analyzing orchestra sheet music. That is one should include the bass parts and everything improvised as belonging to the chords too, because that's what you actually hear. In my opinion Zappa knew no boundaries as it comes to chords.

This doesn't mean that he used every possible chord type at least once, but that there's a reasonable probability of finding them. Both the diatonic ones and the atonal ones.

John Stuart Mill lived in the 19th century, when the possibility of non-diatonic music wasn't even considered. What he couldn't know, and perhaps even Slominsky couldn't, is that pop music has shown that the market for music in 4/4 following the common chord patterns is unsatisfiable. You can fill stadiums with it and get extremely rich and famous by it. It doesn't bother people if what an artist does sounds similar to what other artists have done before. It's a pro rather than a con. There's a market for people as, say, Bartók, Schoenberg, Slonimsky and Zappa, but compared to mainstream pop-music it's marginal.

Beethoven

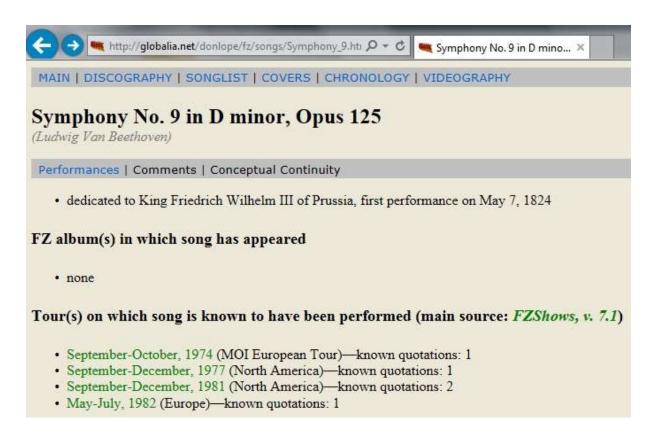
At the bottom of the Thing-Fish section of this study I'm briefly describing the music Zappa covered. There are also many citations of other composers in his own compositions. Though he never openly expressed an interest in composers from before 1900, these composers do get covered and referred to as well. Most notable is his exercise in getting Francesco Zappa's music on CD. Of course it was the latter's name that attracted Zappa's attention first, but it is baroque music. Mozart is present on "Ahead of their time". There are two quotes about Beethoven included in this study, one in the quotes section from the left menu and one in the L.S.O. section at "Strictly genteel". Neither are really positive. Beethoven can also be found as a bust on the "We're only in it for the money" cover (outtake to the right). Citations of Beethoven in Zappa's own songs are only known from the bootleg circuit. Below are a couple of screenshots from the www.zappateers.com and globalia.net sites.



1974 09 16 - Congress Centrum, Hamburg, Germany

130 min, Aud, B+
Tush Tush, Stinkfoot, Inca Roads, Penguin In Bondage, T'Mershi Duween, Dog Meat, Cosmik Debris (q: Hearts And Flowers as intro), Florentine Pogen,
Montana, improvisations (q. Beethoven's 9th, incl. One-Shot riff), Dupree's Paradise (q. Louie Louie), Approximate, Pygmy Twylyte (incl. Dummy Up, Room
Service; q. Mozart Piano Sonata), Tush Tush Tush

Examples of bootleg recordings with Zappa quoting Beethoven's 9th symphony.



Summary of this.

As everybody knows Beethoven gradually grew deaf starting half-way his career, ending up completely deaf in the last decade of his life. One might expect a deaf person to adhere to what he knows. One of the most fascinating phenomena in music history is that Beethoven didn't do that. Instead he started to innovate music in such a degree that over a century many people thought that, at the end, he had become to deaf to compose. He simply couldn't hear that what he wrote sometimes didn't sound right anymore. Today, with most people having become acquainted with modern music, this argument is seldom heard. In fact Beethoven was way ahead of his time. Something for which, in my opinion, he still doesn't get the credit for he deserves.



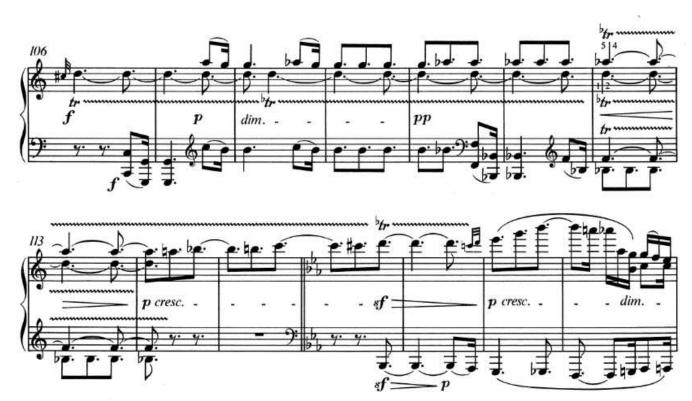
Beethoven, Piano sonata opus 111, mvt. II, bars 98-99.

I would like to say some more about Beethoven regarding an example included in Brett Clement's response to me, where I'm pointing at the presence of a chord, C-D-F-G, that in Brett's terminology might be called "cyclic". By cyclic he means a chord made up of stacking 5ths, as shown to the right (F-C-G-D). Brett reacts: "How embarrassing! The D, F and G are chord tones of the V7 in C major (the C is a dissonant pedal note). How does the use of a dissonant chord in a functionally-tonal piece relate to my theory?"

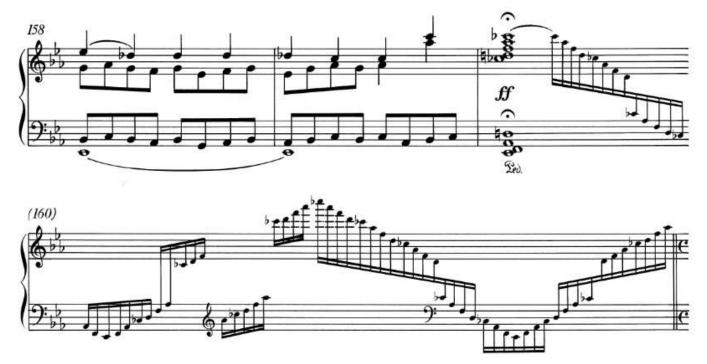
Of course Beethoven follows traditional harmony and in traditional harmony this chord gets interpreted as a dissonant passing chord (exactly as Brett says), which chord needs to be resolved by a triad upon C. Which is formally also happening in opus 111. And of course I'm only trying to make some fun of his theory at this point.

His choice of words, however, is interesting, firmly stating that V7 in C is the only way to look at this example. Then you're missing something. The C-D-F-G chord is being played for a whole bar two times during bars 96-99, being bars 97 and 99, standing as equal next to the C chord from bars 96 and 98. Eventually it does resolve to C in bar 100. My interpretation is that Beethoven is doing more than just letting this chord resolve. He also wants you to hear this chord as an independent chord, a chord by itself. Then it's not "V7 in C", but Csus2 and Csus4 combined. This aspect is of interest in the context of Ruth Underwood saying sus2-chords attracted her to Zappa's music (coming by in the Zappa in New York section of this study). It goes as far back as Beethoven and with modern composers as Debussy and Bartók it became normal to deal with such chords as independent chords, that don't need to resolve.

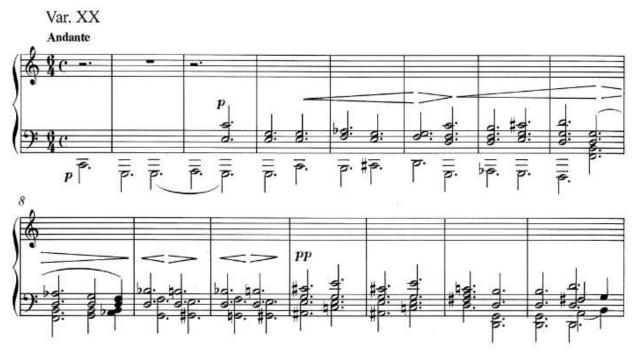
I wouldn't be so sure of this if there weren't many more of such examples in Beethoven's late works. You can for instance hear accentuated dissonants in his late string quartets. Next are three more examples from piano works.



Piano sonata opus 111, Mvt. II, bars 106-119.



Diabelli variations XXXII, bars 158-160.



Diabelli variations XX, bars 1-14.

- Piano sonata opus 111, Mvt. II, bars 106-119: another excerpt from the sonata from above, with Beethoven modulating from C to C minor. Three notes are one by one getting altered, where a tremolo is creating dissonant chords. Most peculiar are bars 112-113, where there's no melodic progression. Instead Beethoven is using a triple tremolo to get at a Bb 13th chord (without the C as 9th). In my opinion he's quite intentionally letting such a large chord sound as an independent chord. Somewhat related to what I'm

depicting above as Zappa using a scale as a harmonic field. Moreover this 13th chord doesn't resolve. It's upper Ab continues as a tremolo, being chromatically led towards the C from bars 115-116.

- Diabelli variations XXXII, bars 158-160. The second fuga from the variations series ends with a dissonant chord, to be played as heavily as possible: fortissimo, with a pedal, sustained and with arpeggios. This chord is Ddim, already dissonant by itself, made extra dissonant by putting an Eb pedal beneath it, being the root of its resolving chord Eb. Again Beethoven's intention of letting an uncommon chord in this case a sharp dissonant chord sound as an independent chord comes out clear. It eventually does resolve in bar 162, but with so much weight upon the dissonant chord this resolution becomes to sound as a mere formality.
- Diabelli variations XX, bars 1-14. Only nominally this variation is in C, it begins and ends in C. In between it's all about altering notes and dissonant chords that don't resolve. In bar 5 a Bdim chord turns up with the A altered to Ab. Its resolving chord would be C. Instead of playing this C chord normally, Beethoven alters the C from it to C#, again creating a dissonant chord. This last C#m-5 chord should resolve to D-F. Instead Beethoven adds a G to it, so again creating a dissonant chord, expected to get resolved to C. Instead of doing that, Beethoven only adds a C to the D-F-G chord, in effect making it more dissonant. Again this last chord doesn't get resolved. It moves over to Ddim, only having the D and F in common with the previous chord. Etc. What Beethoven is doing here is what people later got to call taking tonality to its limits. It's only a few steps away from atonality. It's flabbergasting to hear that a deaf person could do this so effectively in 1823. Even today its harmonies sound modern.

Opposites at work in Zappa's music



The opening of the "Gumbo variations" with G7 resolving to C.



Bars from the "Son of Orange County" solo with C#m7 resolving to B. The best resolving chord according to harmony books would be F#, but B resolves the dissonance quite well too.



Sample from "Black napkins" ("FZ:OZ" version) with C#m7 alternating with Dmaj7. Not only are both 7th chords non-resolving, they belong to different scales too.



Bars from "It must be a camel". See my description at the Hot rats section. This one is extreme as it comes to the possibilities of diatonic harmonies. The sounding result is overwhelming.

Zappa did object to the limitations of traditional harmony. But he didn't replace it by a system of his own, as Brett suggests regarding his instrumental diatonic music. He extended traditional harmony to a situation where there are no limitations, to a situation where no system whatsoever might determine what he should do. Perfectly illustrated by this last example.

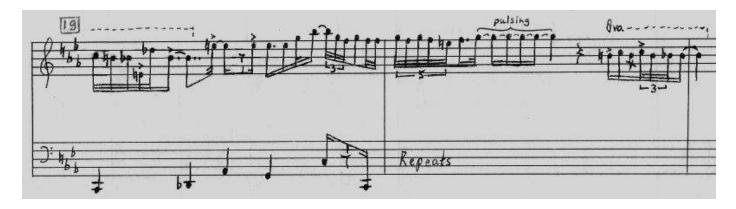
SLEEP DIRT: HARMONIES AND VAMPS (CNTD.)

Three of the tracks from "Sleep dirt", released in 1978, stem from the same period as the "Zoot allures" sessions, namely the ones with the large guitar solos. Zappa for a while thought about making "Zoot allures" a double album, including these takes. The other four songs on "Sleep dirt" stem from 1974-1975. He had written them in 1972 as part of the "Hunchentoot" opera. They first saw the world in instrumental versions, but when Zappa re-released "Sleep dirt" on CD, he had asked Thana Harris for overdubbing the lyrics he originally had in mind for "Hunchentoot".

1. Filthy habits (1988)

We now turn to the opening piece on this album for looking at the use of a vamp. It's called "Filthy habits", presented below in the 1988 version as released on "You can't do that on stage anymore, vol. IV". Zappa used vamps most often for his solos (see the Guitar section), but sometimes also for his compositions. On this occasion a 5/4 vamp is used for the composed section as well as the guitar solo part.





Filthy habits, opening. Transcription: KS (2nd printed edition, reprint 2003).

After three bars of the vamp being introduced solo, the theme sets in in bar 4, lasting through bar 10. Then an Arab styled melismatic melody passes by in bars 11 and 12. This Arab effect is stronger on the original "Sleep dirt" album, where the choice of instruments is closer to an Arab ensemble, that doesn't use the brass instruments of the 1988 version. This little interlude is followed by bars 15-18, that are specific for the 1988 execution. This changing upon his compositions was characteristic for Zappa's career; some more on this subject in the YCDTOSA section. After this composed part the vamp returns in bar 19, now a fourth lower, and Zappa starts soloing. Notable is the fact that Zappa at the beginning uses a Gb for the vamp, while the lead melody has a G natural. In this manner Zappa is mingling F minor (with a G) and F Phrygian (with a Gb). The same happens with the Db versus D natural during the solo. The transcribed bars 19-20 have a Db for the solo and the vamp, corresponding with C Phrygian, but you can also hear a D natural for the solo at 1:49 minute (C minor).

2-3. Flambay - Spider of destiny

"Flambay", "Spider of destiny" and "Time is money" are now performed with lyrics, giving form to the reemergence of "Hunchentoot". At least part of it. It's pleasant to hear "Sleep dirt" in this new CD shape. Not only are the lyrics of interest, they are very well sung by Thana Harris (downloaded photo to the right, photographer unknown). Female singers have frequently contributed to Zappa albums, but this one not only has a female singer as protagonist, but as the only singer. As a vocalist you can hardly wish any better repertoire. "Flambay" is jazz, "Spider of destiny" is relatively normal pop music and "Time is money" can be called modern. It gives Thana the opportunity to sing in varying styles and to let her use her vocal range in full. Analytically and in abstract these new versions create no real differences. Almost all sung notes are also played by the instruments on the original vinyl album. They still can be heard in this manner on "Läther", the quadruple album Zappa had it mind when his problems with Warner Bros. came to a head. It's hard to exactly define what jazz is. The main factors are the element of improvisation and the instrumentation. In case of "Flambay" it's the second. It's performed by an upright bass, drums, piano, vibes and a female singer. Something you might call a classical type of jazz combo (the CD mentions Zappa on guitar too, but I'm not hearing a guitar). The element of improvisation is in this case limited. In all probability Zappa had notated the lead melody and chords on paper. It's the positioning of these chords and the bass movement that, to a point, get improvised, making the three appearances of the main theme sound different. Technically "Flambay" contains extended chords, more typical of jazz than of pop music, and you've got points where there's some inequality between the parts. Something jazz players like to do. There is a lot of improvisation going on the "Sleep dirt" album in total, for which reason it sometimes got referred to as "Hot Rats III". The Ludwig study (see the references) contains the main theme from "Flambay" on page 271 (lead melody). I've written out bars 1-9 in detail, so that the jazz sound comes out more specifically in the midi file (on-line version).



Flambay, 0:26-0:58. Transcription: KS, lead melody by W. Ludwig (update Winter 2018, deposited at the I-depot, The Hague).



Flambay, main theme (lead melody). Transcription: W. Ludwig.

Its global structure goes as:

- 0:00 Intro.
- 0:26 Main theme.
- 1:33 The main theme gets repeated.
- 2:43 Second theme.
- 3:08 Third theme.
- 3:31 The main theme returns, a little extended to include a coda.
- 4:53 End.

Harmonically this piece is quite complex, gliding through often extended chords from varying scales and including chromatic passages. The first four bars of the example above include the following:

- Bar 1: pick up bar, lasting 3/4, with D-Db-D, a chromatic parallel movement of major triads.
- Bar 2: the main theme is in standard 4/4, in a slow tempo without rhythmical difficulties. Now you're getting at an extended chord. The bar opens with A11. Beat four shows a combination of A-E-Gb-Bb, a dissonant combination not belonging to a diatonic scale.
- Bar 3: D, followed by Gmaj9.
- Bar 4: Em7. Ludwig is taking this relatively stable bar as leading for the key. On top of G he notates the theme as (nominally) in G. But all other bars are using chords from different scales. The piece is one of many pieces that I'm calling multi-scale in my Burnt weeny sandwich section. The keys/chords are changing that rapidly, that I don't assign them to specific scales. The text says "flambé", French for briefly inflaming food with high percentage liquor. On "Läther" it gets spelled in the French manner, on "Sleep dirt" as how it is pronounced.

4. Regyptian strut

"Regyptian strut" is of interest for this section both because of its harmonies and its use of vamps. It starts with a little intro, moving from C Lydian to just the Bb add 2 chord. It's similar to the tail of the Variant I transcription (see the Wazoo section for "Variant I processional march"). Next the main theme block

begins. The melody keeps gliding through varying scales, while the bass is making a counterpoint movement.



Regyptian strut, 1:42 till 2:10. Transcription: KS (update 2011, deposited at the I-depot, The Hague).



Regyptian strut, 3:10 till 3:44. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

With its reprise at 1:42 (first example), the harmonies get extended, becoming more complicated. During bars 5-7 the lead melody is played three times, each time harmonized in a different way. Bar 5, beats 1-2, are still relatively consonant with the Esus2 chord. At beat 3 you get F# next to G of the bass and things are getting more and more dissonant. Bar 6 opens with B+C#+D and bar 7 opens with B+C+D#. At 2:28 the finale begins with the band playing over two vamps. Here the use of keys finally becomes stable.

The second example is a section taken from this finale, where the band moves from the first to the second vamp. The first vamp (bars 1-4) is a figure in B Dorian, the other (bars 5-10) is in G# Dorian (the transcription presents the E from G# minor in bar 10, but for the harmonies it's an E# (as at 3:48-3:50)). Harmonically this whole block is characterized by its freedom and formation of mostly untraditional chords. This goes for the two vamps and the lead melody separately, thus the more so for their combination. The lead melody is played via parallel fourths and thirds alternating, except for bar 10. It looks like Zappa overdubbed the brass section an octave higher as well, because they can get exceptionally high. From bar 5 onwards in the transcription the higher registers dominate.

5. Time is money

The following is a combination of a transcription and analysis by me and the presentation in the Ludwig study. Ludwig transcribed the lead melody of the entire song (pages 247-9). His analysis deals with the construction of the song and its use of meters (pages 102-4). It has been complemented by me with the harmonies and a transcription of all parts of the opening (except the drum part). It's a complicated and multi-facetted piece in a number of ways.







Time is money, opening. Transcription: KS (lead melody by W. Ludwig). Update Autumn 2016, deposited at the I-depot, The Hague.

Its structure goes as:

- 0:00 Bars 1-3. Theme A, the main theme. The song starts in 4/4, at this point mingling A minor and A Phrygian. Both B and B-flat turn up, without a real argument to call one of the two only passing. The chords used are:

Bar 1: Gsus2 - Am7 - C7.

Bar 2: Em7- Dm7 - A.

Bar 3: Bb - Am - Gm - Bb.

While bar 3 is using standard triads, the first two bars are more complicated with non-resolving 7th chords. It even takes a while to exactly hear what's going on.

- 0:09 Bars 4-12. Theme B, a series of phrases:

Bar 4: The music moves over to E minor, playing around the Fm7-5 chord.

Bar 5: The pedal note switches to Bb and the key becomes Bb (major or Lydian; the Eb, that makes the difference, is absent). The chords used are Bb and F, so at this point it's a normal sequence with triads.

Bar 6: This apparent turnover to regular pop-music is immediately left in bar 6. This is a chromatic bar with a sequence of mostly minor thirds by the keyboard (staff 4). The lower notes are following the whole-tone scale during beats one and two, doubled by the guitar (staff 2). Here you've got the first meter change, namely to 3/4.

Bar 7: Diatonic again in 4/4. Gb Lydian with Ebm7 and Fm7-9.

Bar 8: Switch to D Locrian. The Ab triad from staff 4 gets combined with a D pedal by the bass, creating the uncommon Locrian key. The D sounds a bit as a dissonant stranger towards this Ab chord. The total harmony becomes Dm7-5 plus minor 9th. The meter is 13/16, subdivided as 4+3+6.

Bar 9: Continuing in D Locrian. The meter is now notated as 4/4, only because it lasts 4/4. Its subdivision is 6+6+4. One might just as well notate this bar in 16/16 or split it into three smaller bars.

Bars 10-12: Now the music gets monodic, being played with parallel octaves. Bar 10 can be seen as a pick-up bar for this phrase of two bars in 2/4. It's in C minor (or Dorian).

- 0:28 Bars 13-14. Theme C.

Bar 13: The music returns to 4/4. This bar contains mainly two sustained notes plus the Eb chord. There are also some notes only lightly audible in the background. The Db on beat two of bar 12 suggests a modulation to Bb Dorian, but one of the background notes in bar 13 is a D natural. Bar 13 by itself thus is in Bb Mixolydian. The only difference between these two scales is the Db versus the D natural and a certain ambiguity about the exact scale some bars are in is common in Zappa's music. As also the opening bars don't really choose between minor and Phrygian.

Bar 14: This bar is chromatic and deliberately irregular. The insertion of such bars is something Zappa does more often. See my discussion of "Inca roads" for more about this. There's a light inequality between the parts at the beginning of bars 13 and 14, causing my 11-tuplet notation in bar 14 with the newly recorded drum part by Chad Wackerman. The original, with Chester Thompson drumming, can be found as a bonus track on "Läther".

- 0:34 Bars 15-16. The first half of the main theme returns. Now it's harmonized differently, namely with the Bb and Ab chords in Bb Mixolydian.

This is where my transcription stops. I'm continuing with the themes and meters from the Ludwig presentation:

- 0:40 Bars 17-18, played twice. Theme D. Ludwig doesn't double-count bars when they get repeated. In order not to create differences, I'm following the meters and thematic subdivision of Ludwig.
- 0:46 Bars 19-21. Variation upon the second half of theme A.
- 0:54 Bars 22-23. Variation upon theme C.
- 1:00 Bars 24-29. Theme E, using 6/8, 9/8 and 11/8.
- 1:08 Bars 30-33. Another variation upon theme C, extended with a 4/4 and a 9/8 bar.
- 1:20 Bars 34-36. Variation upon theme E with 8/8, 7/8 and 6/8.
- 1:26 Bars 37-40. Theme F with 7/8 and 5/8.
- 1:34 Bars 41-44. Theme G. Two different meter divisions are used simultaneously. See the example below by Ludwig.



Time is money, section. Transcription: W. Ludwig.

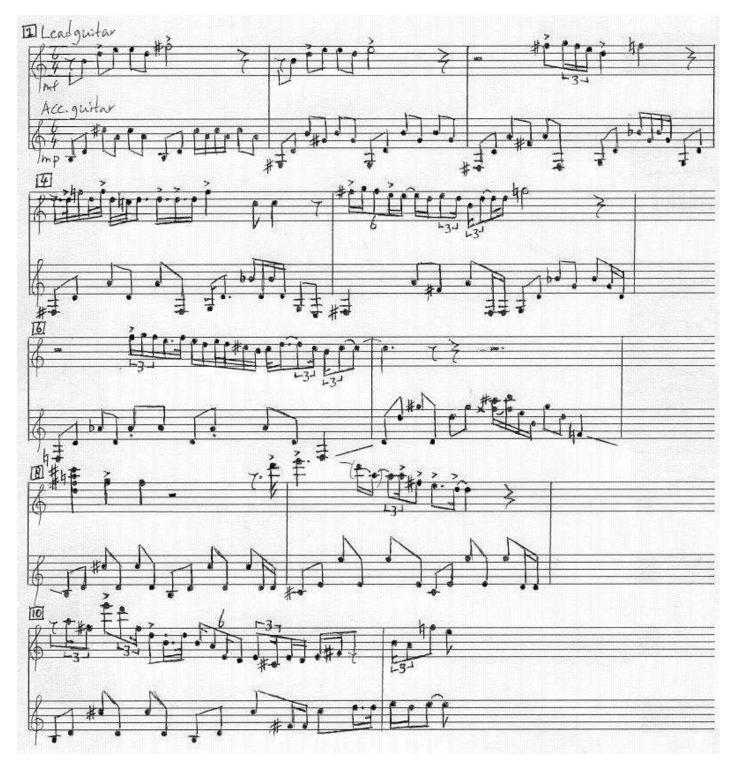
- 1:41 Bars 45-46, played twice. Variation upon theme G in 7/16.
- 1:44 Bars 47-48. Another variation upon theme A in 6/8.
- 1:48 Bars 49-50. Variation upon theme D in 9/16.
- 1:51 Bars 51-53. Theme H in 10/8 and 4/8.
- 1:58 Bars 54-56. Theme J in 10/8, 9/8 and 6/8 (Ludwig doesn't use the "I").
- 2:06 Bars 57-60, played twice. Theme K, continuing in 6/8.
- 2:20 Bars 61-75, fading out. Theme K for the third time, followed by an outro. This is one of the few instances where the vocal part adds new different notes on top of the original tracks.
- 2:48 End.

So you can see:

- All diatonic scales being used.
- Chromatic passages and an instance of the whole-tone scale.
- A wide range of chord types.
- A multitude of themes.
- A large number of meters.

- The "classical" construction method of varying themes, giving the piece its coherence. All this in 2:48 minutes.

6. Sleep dirt



Sleep dirt, opening. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

"Sleep dirt" is a duet by Zappa and James "bird legs" Youman. Youman plays a progression of broken chords in 6/4. The chords in the transcribed bars go as (rock notation):

- Bar 1: Bm9.
- Bar 2: G#m-5.
- Bars 3-5: D and Gm.
- Bars 6-7: Dm-5.
- Bar 8: Bm9.
- Bar 9: C#m3rd add minor 9th as passing through note.
- Bar 10: Bm9.

Zappa only occasionally played solos over such progressions with some less common jazz type chords. "Sleep dirt" sounds quite exceptional in that sense. The soloing itself is unmistakably Zappa, the opening lick of bar 10 for instance is similar to the first "Black napkins" notes.

7. The ocean is the ultimate solution

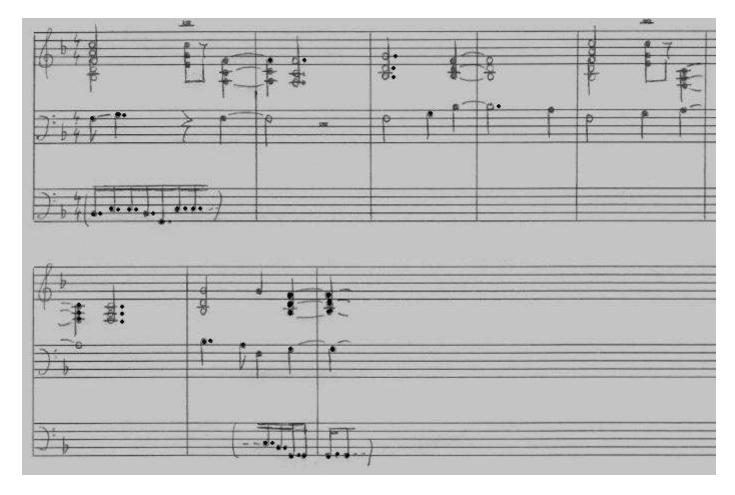
"The ocean is the ultimate solution" originates from a trio jam session lasting over half an hour. Zappa selected 13 minutes from the tape and started overdubbing. Notable is the large amount of improvised chord progressions in it. Its outlines go roughly as:

0:00 Riff #1.The first fragment below is the opening lick in C Mixolydian, which starts off the interplay between acoustic bass and acoustic guitar.

0:12 Chord progression in C Mixolydian. Between 0:45 and 0:53 you find the second fragment below, a melancholic movement with a synthesizer overdub. The repeated chord progression in C Mixolydian in staff 1 at this point is VII 9th -III-IV-IV-V-VII. Staff 2 represents the synthesizer melody that plays slowly through this progression. Staff 3 is Patrick O'Hearn plucking the bass notes rapidly in an irregular way.



The ocean is the ultimate solution, opening bars. Transcription: KS. Both sections: update 2006, 3rd printed edition 2007.



The ocean is the ultimate solution, fragment. Transcription: KS.

The bass is only indicated between brackets for its sound. I don't manage to hear the individual notes separately.

- 1:05 Riff #2, chromatic.
- 1:16 Playing around the I 9th chord of C Mixolydian.
- 1:31 Riff #3 on D, repeated several times and each time followed by a chord progression. First on Gb, later on on F. The scales keep changing.
- 3:18 Playing around I-IV in C Mixolydian.
- 4:03 Chord progression in A Dorian.
- 4:43 Chord progression in F Dorian.
- 4:55 Chord progression in F Mixolydian.
- 5:16 Playing around I-IV in C Mixolydian.
- 5:39 Bass solo.
- 6:50 Guitar solo. The pedal notes are mainly Bb, F and C. The scales used are Dorian and Mixolydian, that differ by one note: a minor third versus a major third.
- 13:17 End.

ZAPPA IN NEW YORK: IRREGULAR RHYTHMIC GROUPINGS

While 1971 ended with physical disaster, 1977 saw the start of litigational warfare, with Zappa's main business associates becoming his enemies. The relationship with his record company Warner Brothers had become under strain and Zappa wanted to end his contractual obligations by delivering the tapes for the four records he was still due at once. But Warner Bros. refused to pay the agreed advances for these records at one time, nor did they set off releasing them in time. A lasting lawsuit followed, interacting with the running lawsuit about Discreet with Cohen, since Discreet was a label of Warner Bros. Subsequently Zappa went negotiating a new contract for releasing this material, now in the form of a four record set called "Läther". In October 1977, when the first "Läther" boxes already had been pressed, Warner Bros. decided to release the material handed over to them anyway as the originally planned individual records, one live album "Zappa in New York", and three studio albums "Studio Tan", "Sleep Dirt" and "Orchestral Favourites". For "Zappa in New York" Zappa had handed over the material for the album cover, but there was no cooperation whatsoever for the studio albums. They were released in a sloppy way with low budget cartoon covers and no promotion. It enraged Zappa and he publicly uttered his anger with setting up a "Warner Bros. sucks" banner on stage and stating the same on record. Squeezing out a contract once the relationship is ended is regrettably common practice in rock business though and things far worse have happened to other artists. In 1997 the "Läther" version collection was released on three CDs. Unfortunately these issues don't overlap for 100%, so you still have to buy them both to be complete. The lawsuits were mainly settled behind closed doors, when Zappa was given the opportunity to buy the copyrights from Warner Bros. and the mastertapes of his recordings were handed over to him in 1982. It led to a unique situation, where a well-known rock musician became completely in control over his business.

Zappa loved playing in New York and rented an apartment there from 1967 to 1968, when he recorded a vast amount of music for "We're only in it for the money" through "Uncle meat". His return to L.A. was financially motivated. Various live albums were recorded in New York and the yearly concerts around Halloween became famous for the interaction with the crowd. More about this in the next "Baby snakes" section.

ZAPPA IN NEW YORK, PALLADIUM, DECEMBER 1976.

We'll take "Zappa in New York" and some other albums to look at examples of Zappa's appetite for rhythmic variation. His desire for rhythmic diversity is very persistent in his music. The early "Run home slow theme" from the movies section is already a clear example. When you look through the examples in this study you'll see bars with normal divisions in three or four (like the "Strictly Genteel" example, L.S.O. section) as well as bars with odd divisions and syncopes (like "It must be a camel", Hot rats section, and the "Eric Dolphy memorial party", Burnt weeny sandwich section). In the polyrhythmic "What will this evening bring me this morning" example (also included in the Burnt weeny sandwich section), the changing rhythm of the melody, sung over 4/4, is reflecting the lengths of the syllables of the words. Zappa has frequently addressed to his rhythms as speech influenced, meaning that the rhythms aren't calculated, but following a free movement comparable to spoken language. Sometimes the speech influence is direct, when a melody is adapting its rhythm to the lyrics sung along with it. This is very recognizable in "Evelyn" from "One size fits all" and the live improvised recitatives "The dangerous kitchen" and "The jazz discharge panty hats" from "The man from Utopia", with the guitar part later added to it in the studio. Next is a sentence from "Wild Love" from "Sheik Yerbouti" (see also the disco section for this melody). The rhythm as well as the melody is influenced by the accents of the words.



Phrase from Wild love. Transcription: KS (2nd printed edition, 2001).

On paper Zappa's rhythms can sometimes look strange, but when you listen to them, they sound more natural. In the case of instrumental pieces and guitar solos the speech influence is indirect, as if the instruments are trying to talk to you without words.

1.1 Titties and beer

"Titties and beer" from "Zappa in New York" has a two bar rhythmic riff in F# Dorian, including the use of pauses. The first bar is on beat, the second syncopic. The second theme of the song is more melodic, using a chord progression in B Mixolydian.



Titties and beer, transcription: KS (update 2005, 3rd printed edition 2007).

This second theme thereafter turns into a vamp, that is played as accompaniment for the dialogue of a biker (Zappa) and the devil (Terry Bozzio). This was Zappa's usual way for recording pieces with monologues and dialogues, like the "Central scrutinizer" intro of "Joe's Garage", and much of "Thing-

Fish". To the right: Ike Willis wearing the "Titties 'n' beer" T-shirt from the FZ/ZFT merchandise collection on stage (1988). Zappa and Terry Bozzio performed their routine for over a year, with another version appearing on "Baby snakes". It remained the same song with only some variation in the text. On ZFT releases it has appeared under a different title, "Chrissy puked twice".

1.2 Cruising for burgers

The double CD re-release more than compensated for the mutilated form Warner Bros. had released "Zappa in New York" as a double album in 1978. Not only "Punky's whips" could be included as intended, four tracks could be added as well. "Cruising for burgers" is an impressive instrumental version of this title, that first appeared on "Uncle Meat". See the corresponding section for two examples. Here it goes different in a number of manners and it includes a large solo. It might just as well have been called Cruising for burgers variations or Son of Cruising for burgers, as Zappa would sometimes do when he returned to a piece in a different jacket. The solo is in D Mixolydian and the accompaniment is using a vamp.

1.3 I promise not to come in your mouth





I promise not to come in your mouth, opening. Transcription: KS (update 2006, 3rd printed edition 2007; a few details corrected in 2012).

"I promise not to come in your mouth" is a sensitive instrumental ballad (Zappa's own words) in 6/4 in the key of C minor, introducing two short but fine solos. One by Zappa on guitar, the other just as strong by Eddie Jobson on keyboard. Its opening riff is an early example of so called hocketing, leading a melody over various instruments.

- Bar 1: in this bar, played four times, the melody is led over six staves. Because various notes are sustained, you get all sorts of harmonic combinations. He would apply this a lot in the later synclavier works.
- Bar 5: transitional bar with a bass lick and the keyboard improvising.
- Bars 6-7: a chord progression, Dm-F-G-Dm-G-Eb-Ebmaj7. The last chord is sustained for a bar with the keyboard improvising.
- Bars 8-10: second theme. The scale in bar 9 changes shortly to D minor. Again the ending chord is sustained for a bar, again with the keyboard improvising.
- Bars 11-12: variation upon the second theme. Its lead melody is the same, but the accompaniment, especially the ending chord, are different. This last chord is a larger chromatic chord.

The solos in the middle of this piece follow a modulation scheme. The set-up of the song goes as:

- 0:00 Main theme. See above.
- 0:54 Guitar solo begins in D Lydian.
- 1:10 C# Lydian.

- 1:18 F# Dorian (I-IV movement).
- 1:27 D Lydian.
- 1:43 C# Lydian.
- 1:52 F# Dorian.
- 2:00 Keyboard solo begins in A Dorian.
- 2:04 Bb Lydian.
- 2:08 B Dorian.
- 2:13 C Lydian.
- 2:17 C Dorian.
- 2:20 C# Lydian.
- 2:24 D Dorian.
- 2:29 Eb Mixolydian.
- 2:33 D Mixolydian.
- 2:49 C# Lydian.
- 2:57 F# Dorian.
- 3:05 Main theme returns.
- 3:32 End

In his discussion with me Brett Clement writes about the Mixolydian episodes: "I don't find any; seems pretty consistently Lydian/Dorian". Indeed Lydian and Dorian dominate, so I've checked this again:

- 2:29-2:33: Eb pedal with Eb-F-G-Ab-Bb-C-Db = Eb Mixolydian.
- 2:33-2:49: D-C, D-C-D etc. pedal alternation with D-E-F#-G-A-B-C = D Mixolydian.

1.4 Punky's whips

While unable to release "Punky's whips" as planned, Zappa included this title in his "Baby snakes" film, of which the soundtrack was released separately in 1983. It's from the Palladium concerts from the year following upon the "Zappa in New York" recordings. On these two releases "Baby snakes" has remained basically the same song, but there are differences at a detail level. See the next section for a transcription of the 1977 edition of its opening.

"Punky's whips" is mocking at Punky Meadows, lead guitar player from the glamrock band Angel. This band performed in all white suits, illuminating an androgynous appearance. Specifically Punky used it for attracting attention, with a publicity photo of himself with a voluptuous hairdo, kissing like a women. W. Bros, who also had financed the Casablanca label, that Angel had a contract with, became afraid of negative effects. After some copies of the original album had already reached the stores, W. Bros brought out a different version without this song. Punky Meadows himself saw the humor of it. In an article by Michael Little at www.washingtoncitypaper.com, May 2002, Punky commented: "I thought it was cool. Frank is very satirical, so you can't have a thin skin. I found it kind of flattering. Around the time he wrote the song, he was playing in L.A. He asked if I'd be willing to come onstage in my Angel costume and play with him on the song. I went to the concert, the curtain goes up, and there's this giant publicity photograph of me doing this pucker kind of thing. It was like Dean Martin's roast or something. Afterwards, Frank asked me to his place to drink some beer and play some tunes." To the right Punky in the dressing room in his Angel outfit.

1.5 Honey, don't you want a man like me?

"Honey, don't you want a man like me?" is available in three versions in Zappa's own catalogue and three more via the later ZFT releases. I've included examples from four versions in the YCDTOSA section, covering the time-span 1976-1988. Specifically the 1980 version is heavily re-arranged. The initial version is probably the one on "Joe's camouflage" from 1975, yet again going a bit differently.

1.6 The Illinois enema bandit

The lead melody from "The Illinois enema bandit" is present in the Ludwig study, page 269 (see the references). His transcribed section concerns the opening of this song, after the introduction by Zappa and Don Pardo (1:05 through 2:02). It's notated in 6/8 and played over a D pedal by the bass. The key thus is D Dorian.

- 269 -

2 x) The Illinois Enema Bandit (ZAPPA IN NEW YORK)



The Illinois enema bandit, lead melody. Transcription by Wolfgang Ludwig.

This transcription concerns the central theme. As you can see it's made up of a series of phrases, that are variations upon each other. As you can read in the liner notes, this song is based upon a true story, which Zappa filled in with a number of fictitious details from the trial. Roy Estrada, who gets mentioned at the end of the song, was the bass player on Joe's Camouflage when an early rehearsal version got recorded. Roy also portrayed the enema bandit on stage, wearing a ski-mask and an enema bag. The actual enema bandit was released from prison in 1981 and seems to be living rather anonymously ever since.

Ray White, at some points singing the lyrics of this songs as fast as possible, comments in the "Zappa in New York Deluxe" booklet: "PS. The line at the end of The Illinois Bandit was supposed to be "Potato head Bobby" ... in my excitement, it came out "Mopato Tedded Bobby." I laughed, Frank laughed, and he left it on the record."

2.1 I'm the slime

"I'm the slime" and "Pound for a brown" are two more bonus tracks from the CD re-release. They are live versions of these titles, that were released earlier as studio recordings. An example from "I'm the slime" can be found in the corresponding Overnite sensation section of this study. For his December 1976 shows Zappa had invited Don Pardo, a TV announcer, best known from his decades of work for Saturday night live. Don was asked to act as a narrator for the show, doing for instance the intro for "Punky's whips" and part of the melt-down lyrics from "I'm the slime".

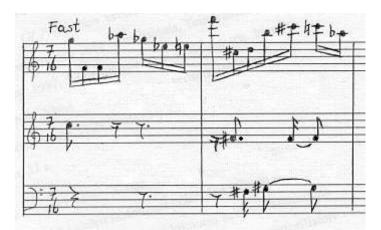
2.2 Pound for a brown

"Pound for a brown" stems from "Uncle meat", but gets dealt with in the Zappa's teens section from this study, when it was written. This title was part of almost every set-list Zappa played. Its main themes remained the same, but it did allow band members to solo. He had met the Brecker brothers at the Saturday night live show a month before. They enjoyed playing with Zappa that much, that they asked him if they could join in on the December concerts too. Zappa more than welcomed this, augmenting the band with a brass section. Specifically on the 5-CD Deluxe edition, many solos can be heard by these brass players.

2.3 Manx needs women

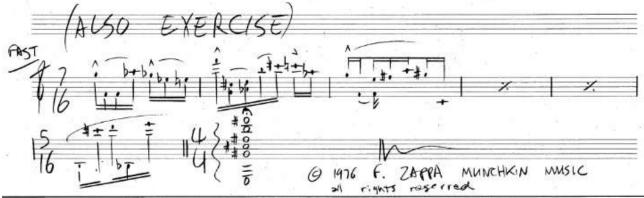
"And for our next number", to quote Zappa, a piece with irregular groupings from "Zappa in New York", called "Manx needs women". Other than the next track with irregular groupings, "The black page", this composition doesn't follow scales. It's atonal, full of dissonants and contains changing meters. The figures with irregular groupings in bars 1-4 are played in the form of parallel major 7ths. The opening bars in 4/4 are played slowly, followed by fast strings in 7/16. "Manx needs women" is one of the most aggressive pieces Zappa ever wrote, quite different from the friendly "I promise not to come in your mouth" or the traditional blues of "Big leg Emma".





Manx needs women, opening. Source/transcription: original score as published in Guitar Player, January 1977 (lead melody), supplemented with harmony notes and a bass line along the "In New York" version by KS. Update 2007, deposited at the I-depot, The Hague.

Zappa presented the lead melody of the opening from "Manx needs women" as an exercise in Guitar Player, January 1977. I used this example as the starting point for the example above. There are, however, some differences in the lead melody between the above Guitar player version, the "In New York" version and the "Philly '76" version. Zappa does this all the time and, from the analytical point of view, it has confused me a couple of times. You can come to a completely correct conclusion based upon one version. Then you encounter another version and it's not applicable anymore.



Guitar Player asked Zappa to contribute an original musical example, and he sent the above.

Bottom part of the "Manx needs women" example from Guitar Player in Zappa's handwriting.



Manx needs women, bars 1-2. Source: original score as published in Guitar Player, January 1977.

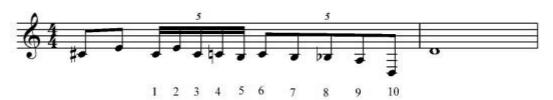


Manx needs women (Philly '76), 0:08-0:16. Transcription: KS (update Summer 2018, deposited at the Idepot, The Hague).

(a) A statement



(b) A' statement, 1:04-1:08



Example 2.12 from the Clement study.

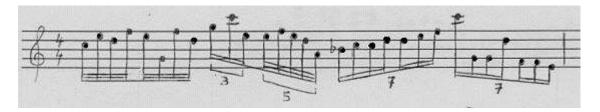
Note: the half-note pause must be a writing error for a dotted half-note. The 13-tuplet lasts a quarter note on the CD (like the 11-tuplet in my first example).

This second example concerns the opening bars demonstrating this. There's little time between the three versions, nowadays available, so it remains peculiar to notice how frequently Zappa changed his compositions while being on the road.

- The example from Guitar Player has an 11-tuplet as a pick-up bar.
- The "Philly '76" version begins with series of synthesizer figures passing through high registers. Staff one contains squeaking descant notes, getting so high that you need a quindecima clef to notate them. It sounds really weird, and, as more often in Zappa's output, it's a one-time only experiment. It didn't reach an official album by Zappa himself, but it's on a ZFT release. At 0:08 the drummer joins in, at which point the example from above starts. It's only two bars, lasting through 0:16, but quite a lot is happening in it. As you can see the synthesizer figures are played as 10- and 11-tuplets. The pick-up bar from the Guitar Player example returns in a different shape, now a 9-tuplet with tuplets within tuplets. At two points you can hear a triplet within this 9-tuplet. It's played as a series of thirds with both minor and major thirds being used. The idea to use major 7ths apparently arose when mixing the Palladium concerts. The "Philly '76" version doesn't have the severe dissonant character as the first example from above has. Bar two contains a Gm chord, just as bar 1 from the Guitar Player example being sustained for one bar. - In the "Zappa in New York" version the 11-tuplet returns in the shape of a 13-tuplet, to a large degree containing the same notes as the 11-tuplet. This last example stems from the Clement study, where he noted that this melody returns later on in this composition in a different rhythm (Clement calls this "isomelism"): "Isomelism often supports A-B-A form, or other formal schemes that approximate symmetry, in Zappa's music. "Manx Needs Women" (ECE 1976/1978a), for example, manifests a simple A-B-A' design, the A' section of which is heralded by an isomelic relation with the opening melodic gesture (Example 2.12). However, as can be seen in Example 2.12, the variation that opens A' is much more rhythmically distinct than the original melodic statement. In fact, the first presentation of the theme is performed so fast that it is doubtful that any listener will hear the isomelic relationship shown in the example. Instead, the isomelic technique reinforces the fact that both A and A' are composed in the hybrid style; therefore, the recapitulation not only restates a "main theme", but also recapitulates a stylistic category."

2.4 The black page drum solo/Black page #1

On "Zappa in New York" the 1976 band performed an instrumental piece full of irregular rhythmic groupings, called "The black page #1", originally a test piece for drummers, to see if they were able to beat this kind of rhythms, like:



The black page #1, bar 4. Source: original score.



Thumbnail image of the drum part from The black page #1. See below for bars 1-5.

"The black page" is rhythmically as well as harmonically very irregular, but it also contains elements that bring stability to it:

- The meter is 4/4 throughout.
- The same scale is used at least for the duration of one bar.
- There's a tendency to alternate speeding up and slowing down.
- There's also a tendency to alternate rhythmically complicated figures with moments of a relative rhythmical calm.
- In some bars the melody from former bars is repeated.

The next example contains the two opening bars and bars 16 and 17 (1:53 till 2:00 and 2:52 till 3:00 on track 4 of disc two), where the rhythm of the first two bars, including triplets and a quintuplet, is exactly repeated by a different melody (in fact this goes for a longer period: bars 1-11 compared to bars 16-26). When you take the opening bass notes in these bars as key notes, the melody in these four bars is using:

bar 1: G Lydian

bar 2: B flat Lydian

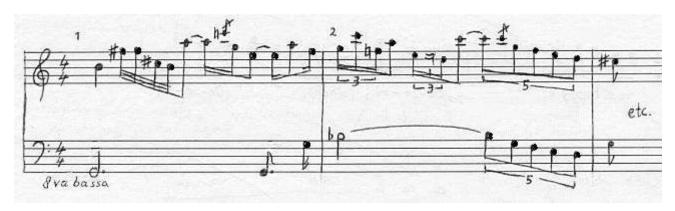
bar 16: D Lydian

bar 17: G flat Lydian.

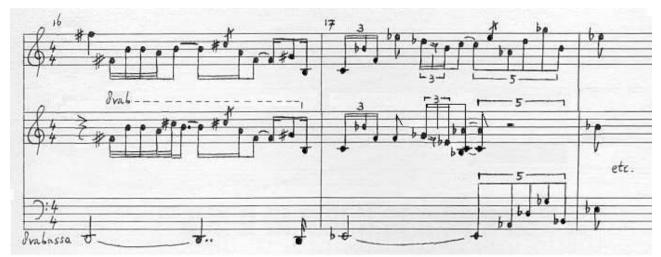
The earlier editions 1-3 of this study had an Eb for bar 17, but after relistening I had to correct this to a Gb (bar 18 does begin with Eb, moving to F). Something happening in Zappa's music very often is that little changes are made upon the score, mostly regarding the harmony. In this case the melody and its rhythm are carefully composed. No deviation was allowed as it comes to this aspect of the "Black page". Regarding the harmony and accompanying figures, things could change all the time. See also below at "The black page #2". Already during its live premiere, some changes were made:

- The sus2 chords from the score got skipped. Only the root notes are present as bass pedal notes. Instead of the sus2 chords you can hear some overdubbed harmonic fill-in in the background during the opening bars, played by Louanne Neil on harp.
- The marimba by Ruth Underwood is taking the lead. The keyboard and brass mostly play along, but sometimes they are also hitting some notes of their own, forming harmonies with the marimba part. See staff two of my transcription for the details during bars 16-17.

"The black page drum solo" has exactly the same rhythm as the "The black page #1". On the album Terry Bozzio's drum part is doubled by Ruth Underwood on percussion, probably overdubbed. She is using cowbells, that have vague pitches. So there is some implied melody present in "The black page drum solo" album version as well, here improvised by Ruth. Terry is doing some extra ticks on the hi-hat, that aren't prescribed, as if he is directing himself. The "Black page" and "Manx needs women" not only contain various forms of irregular groupings, but also examples of irregular groupings within irregular groupings. Bar 5 from the "Black page drum solo" example contains a triplet that gets subdivided into two quintuplets and one sextuplet. Bar 3 from "Manx needs women" shows a triplet within a quintuplet.



Black Page #1, bars 1-2. Source: original score, bass added by KS.



Black Page #1, bars 16-17. Source: original score, bass and some harmony notes added by KS.



The black Page drum solo, bars 1-5. Source: original score (cowbell and additional drum ticks added by KS, update 2009).

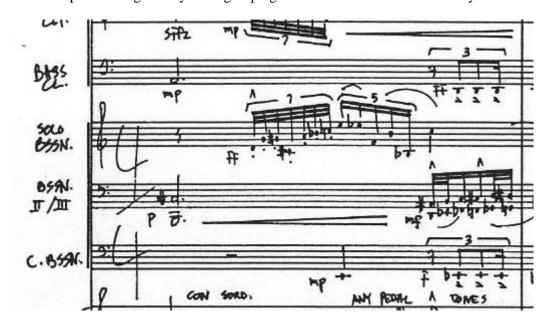
Notation for the drum set (bottom up): bass drum, floor tom, snare drum, toms 1-2, hi-hat, choke cymbal, roto toms 1-3. DR: drumroll.



Advertisement sample of the Black Page #1 score, including the above examples. Available at Barfko Swill.

The indicated 2-chords mostly aren't played that way on any Black page performance, only the root bass notes are taken over as pedal notes.

Some samples of irregular rhythmic groupings from other sections of this study:



Can I help you with this dummy, part of bar 27 in Zappa's original handwriting. Source: Songbook.



Filthy habits, bar 11. Transcription: KS.



Bar from Yo' mama. Transcription: KS.



Clarinet staff from a bar from Get whitey. Source: original score.

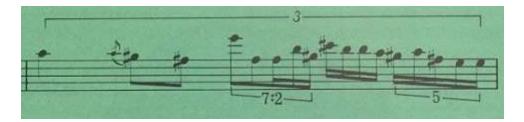
These few other examples of irregular groupings, to be found in many Zappa compositions, are bars from four compositions from 1971 through circa 1990.

- a) The first is one of the many parts of bar 27 of "Can I help with this dummy". This composition was intended for inclusion in the "200 Motels" soundtrack of 1971, but fell off due to performing difficulties. The complete orchestra score in Zappa's own handwriting is included in the The Frank Zappa Songbook Vol. I. It became included in the suite version of 200 motels and received its first performance during the Holland Festival of 2000 at the Carré theatre in Amsterdam.
- b) Next is a bar from "Filthy habits" from "Sleep dirt" with a sextuplet. See the Sleep dirt section for more of this piece in the 1988 version.
- c) A bar from "Yo' mama" with improvised irregular groupings. See also the Shut up 'n play yer guitar section.
- d) A bar from "Get whitey". In the nineties Zappa would take irregular groupings into more extreme forms as in this synclavier composition. This by itself already odd 23-tuplet also has notes of unequal length within it. See the Synclavier #2 section for more.

When you're looking at all irregular rhythmic groupings in "The black page #1", and some other rhythmical aspects, you're getting at:

- Bar 1: normal, with some syncopes.
- Bar 2: triplets and a quintuplet.
- Bar 3: on beat.
- Bar 4: triplet, quintuplet and septuplets.
- Bar 5: quintuplets and a sextuplet within a triplet.
- Bar 6-7: normal, with some syncopes.
- Bar 8: quintuplets and a sextuplet within a triplet.
- Bar 9: a whole note.
- Bar 10: triplet and quintuplets.
- Bar 11: quintuplets.
- Bar 12: on beat.
- Bar 13: string of 32nd notes, still on beat.

- Bar 14: pauses and a repeating group of four 32nd notes.
- Bar 15: a septuplet and quintuplet within a triplet.



The notation of bar 15 in Keyboard magazine, Feb. 1987 (above), may cause some initial confusion how it should be read. When you compare it to the actual performance, it confirms it should be interpreted as:

- a) 1st beat of the triplet: the first quarter note and the following two eighth notes (A-G#-F#).
- b) 2nd beat of the triplet: the septuplet as 7 16th notes for two quarter notes (7:8 as 16th notes).
- c) 3rd beat of the triplet: the four 16th notes plus the quintuplet.

About this bar Ruth Underwood writes in the "Zappa in New York Deluxe" booklet: "In measure 15, Frank's melody seems to break from the time, float briefly, collapse, and catapult towards measure 16, where it regains its footing. (I used to refer to it as the "falling down the stairs measure", and Frank would smile.)"

- Bar 16: normal, with some syncopes.
- Bar 17: triplets and a quintuplet.
- Bar 18: on beat.
- Bar 19: triplet, quintuplet and septuplets.
- Bar 20: quintuplets and a sextuplet within a triplet.
- Bar 21-22: normal, with some syncopes.
- Bar 23: quintuplets and a sextuplet within a triplet.
- Bar 24: a whole note.
- Bar 25: triplet and quintuplets.
- Bar 26: quintuplets.
- Bar 27: quituplets and 11-tuplets.
- Bar 28: triplet and a half note.
- Bar 29: quintuplets and a sextuplet within a triplet, followed by two more 11-tuplets.
- Bar 30: a whole note ends this composition.

As already mentioned bars 16-26 are using the same rhythmical figures as bars 1-11. One can also notice that the figure with two quintuplets and one sextuplet within a triplet is used five times. In fact most rhythmical figures have a tendency to return with the 11-tuplets being reserved for the end. Melodic similarities can also be discerned. Bars 19-22 are a repetition of bars 4-7. Bars 8 and 23 differ by only one note. Bars 24-25 are a transposition of bars 9-10, being a major second lower. While most people concentrate on the rhythm of "The black page", one might also look at the harmonies the subsequent notes of the melody are forming, next to the intervals being used. Then you also get an idea of Zappa's search for variation. In bar 1 you're soon getting at the 11th and 13th on top of G. The melody doesn't use the D during bar 1, but if you would play the Gsus2 chord from the score too, all notes from the G Lydian scale would be involved. The quintuplet from bar 2, on the other hand, could be seen as a Dm7 chord by itself (with a G as a passing note). The last four notes of the sextuplet from bar 6 are a stacking of fourths. The first septuplet from bar 4 involves only seconds, while the second lets notes jump around by using varying intervals. Etc.

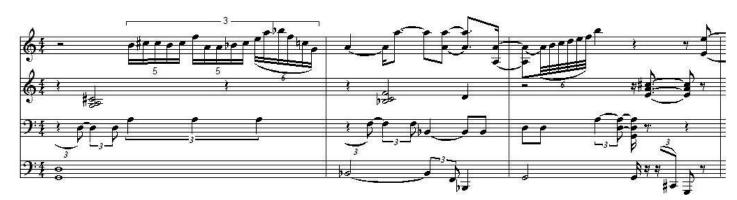
Zappa himself used the terms polyrhythms and rhythmic dissonance, rather than irregular rhythmic groupings. These words can be seen as synonyms. Irregular rhythmic groupings have a clear definition. It

concerns any rhythmic relationship that isn't even. An odd-numbered figure over an even number or two different odd-numbered figures happening simultaneously. They are directly recognizable by their use of numbers in the note system. Triplets, 3:2 or simply 3, are a common irregular rhythmic grouping. Strictly by the meaning of the word, it can be argued that the term polyrhythms is wider than irregular rhythmic groupings. Two different rhythms, but even in their notation, could also be called polyrhythmic. In the Clement study (see the left menu) a smaller thesis can be found, calling rhythmic dissonance Zappa's trademark (set equal to irregular rhythmic groupings). The "Black page" is getting a lot of attention in this study. This thesis is correct in the meaning that Zappa uses such figures more than average. The Roxy section contains a table with all examples in my study containing irregular groupings, specified in the last column. My study is kind of boring as it comes to conclusions. There are no eye-openers in it as it comes to how Zappa composed. Personally I'd prefer to say that he just did anything as it comes to looking for rhythmic variety, with irregular rhythmic groupings as (only) one of his approaches. The Roxy section gives a brief overview.

The "Black page" is usually played in the shape of version #2, easier to perform than version #1. The 2019 "Zappa in New York deluxe" edition contains piano performances by Tommy Mars of version #2 and Ruth Underwood of version #1 (to the left a photo of her from the CD booklet). Of importance is the synclavier execution of "The black page #1 (1987)" by Zappa himself, because it's handling the harmonies in quite a different manner. Two examples are included in the Jazz from hell section from this study, showing the use of parallels, countermelodies and a much higher degree of chromaticism. In the liner notes of "Zappa in New York Deluxe" Ruth Underwood is again commenting upon the presence of 2-chords, as she did before on the Overnite sensation/Apostrophe DVD. Zappa is indeed using sus2- and sus4-chords more than average and in the score example from above sus2-chords are prescribed systematically. Other types of diatonic chords are common in Zappa's music too:

- Triads are the standard chord in Western music and also in Zappa's music their presence exceeds other chord types. See for instance the "Village of the sun" score in his own handwriting (included in the Roxy and elsewhere section).
- 7th chords.
- 9th, 11th and 13th chords.

The last three chord types are uncommon, but Zappa loved their sound. See the Zoot allures section for more on this topic and the Shut up 'n play yer guitar section for me citing him saying that the fun doesn't start till you get at the 11th. Various people have tried to explain Zappa's music in musical terms or by comparisons with other composers, scholars and non-scholars alike. Some people even think this is the goal of musicology. When you hear Ruth talking about 2-chords, it looks like she belongs to this category, explaining that one should concentrate on sus2- and sus4-chords, being typical of Zappa. But is this really what she means? On the "Zappa in New York Deluxe" CD you can hear her playing a piano version of "The black page #1":





The black page #1, piano version, bars 20-25. Notes/transcription: original score with the accompanying harmonies written out by me.

- Bar 20: on top of G-D as a fifth an A7 chord is played (no 5th). The total harmony becomes an 11th chord on G (no 3rd, no 7th).
- Bar 21: Bbsus2 and the Bb triad.
- Bar 22: on top of G-D as a fifth an A major triad is played (with the C# from this triad coinciding with the C# Zappa notated for the lead melody). The total harmony becomes a 13th chord on G (no 3rd, no 7th).
- Bar 23: Bb-G as a fifth.
- Bar 24: Csus2.
- Bar 25: Csus2 and Gsus2 add 4.

So no, I don't think that's how she meant it. She liked the presence of 2-chords in Zappa's music and they are present in her piano version too. But her overall treatment of harmonies is in line with the findings of this study. One should always be careful about the context or the part that doesn't get mentioned. Otherwise you're both doing Ruth Underwood and Zappa's music injustice. This also goes for when you're quoting Zappa himself. It may look like you're safe doing so, but when you don't look at or don't mention what he's not referring to as well, you can easily get at a one-sided picture. Another thing one should realize is that maybe in pop music and traditional harmony sus2- and sus4-chords are uncommon, in modern music they aren't. Already Beethoven took steps to treat these chords as independent chords (see the bottom of the Zoot allures section from this study).

Below, and in other sections from this study, I'm continuing with "The black page #2".

2.5 Big leg Emma

"Big leg Emma" was originally released as a single in 1967. It flopped, so for about everybody living in this decade this live version must have been their first acquaintance with this song. Its blues scheme is briefly indicated in the Bongo fury section of this study and further worked out below. Since everybody can recognize such a scheme, it's the most accessible song on the album. After the little intro the 12-bars blues scheme is used for the verse, as well as two times for the instrumental interlude.

I. Soprano sax in Bb:



II. Tenor sax in Bb:



III. Trombone:



IV. Bass guitar:



V. Vocal part sample:



Previous pages: Big leg Emma, intro and verse (arr. FiftyII50).

Note: the vocal part is included in an mp3 file I also received, upon which I'm basing part of the analysis (like the harmony upon V being a B chord).



Idem in the literal Zappa in New York execution, stressing the mingling of Dorian and Mixolydian in the vocal part too.



Big leg Emma, section. Transcription: KS.

In 2018 Marcel Chrétien of the Zappa cover band FiftyII50 shared the material of the thirty-some titles his band is playing with me. Among them "Big leg Emma". The first example above is the opening of this song, following the arrangement for his band. The song can either be notated in 4/4, with triplets most of the time, or in 12/16. The second example is the second half of the instrumental interlude as played on

"Zappa in New York". As has been commented upon at large in the Imaginary diseases section of this study, blues can be assigned to keys, though knowing an amount of freedom in its choice of chords being major or minor. This also goes for this title:

1st example:

- The four bars intro is a chord progression: B-A-E-F#m-G-F#m-E(-B). Apart from the G-chord, it follows E major.

The 12-bars blues scheme:

- Bars 5-8 upon I: E Dorian (sung part) and E Mixolydian (brass).
- Bars 9-10 upon IV, only the bass pedal note switches.
- Bars 11-12 upon I.
- Bar 13 upon V, using a B chord.
- Bar 14 upon IV.
- Bars 15-16 upon I, repeating bars 3-4 from the intro.

2nd example:

- Bars 1-4 upon I: E Mixolydian with chromatic passing notes.
- Bars 5-6 upon IV: the bass plays the G natural from E Dorian.
- Bars 7-8 upon I.
- Bar 9 upon V. Bars 9-12 are a return of the intro.
- Bar 10 upon IV.
- Bars 11-12 upon I.

2.6 Sofa (1976)

"Sofa (1976)" is the live version of "Sofa no. 1" from "One size fits all". In the album's liner notes Zappa continues with saying: "Since that album was not very popular, this presentation might guide a few curious listeners back in that direction to check it out." While he had praised W. Bros. earlier for their promotion of "Apostrophe (')", things had turned around in 1976. During the intro of "Sofa" and "Irate phone calls" as on the Deluxe edition (see below), Zappa is commenting on this item. A smaller section from the interlude of this specific Zappa in New York version is included in the Weasels ripped my flesh section of this study. "Sofa no. 2" can be found in the Playground psychotics and One size fits all sections.

2.7 The black page #2

Irregular as the rhythms and harmonies of "The black page" may be, the constant factors in it make it inducive for applying other arrangements. These elements are the constant 4/4 basis all through and the fact that everything is diatonic. There are some bars with too few notes in them to positively identify a scale, but when this can be done, all bars are in Lydian. You've got different pedal notes per bar or couple of bars that quite clearly set the key notes of the varying Lydian scales. These stable attributes make it possible to change the character of the piece by modifying the 4/4 accompaniment. With the exception of a synclavier execution, a bonus as a flexi single coming along with a Guitar Player issue, Zappa returned to "The black page" in the shape of version #2 for doing so. The reason was probably that this version was less dense, so that the audience might more easily grasp the idea behind it. Three other examples of such versions of "The black page" are included in this study:

- "The black page #2": the disco version from "Zappa in New York". Its opening is described in the Sheik Yerbouti section.
- "The black page (1984)": the fast reggae or ska version. The opening bars are presented in the YCDTOSA section.
- "The black page (new age version)": a pretty much re-arranged jazz version from the 1987 tour.

Ruth comments about this aspect of "The black page" in the "Zappa in New York Deluxe" booklet: "The

Black page has proven to be one of Frank Zappa's most intriguing and enduring compositions. It is performed in many kind of venues all over the world. It is taught and studied in schools. Perhaps most exciting is that it is adaptable and lends itself to a variety of orchestrations and re-workings, as FZ himself demonstrated. I am proud that after forty years, mine is finally among them [the piano version from above]. It is my love letter to Frank and Gail."

The essay by James Borders in Expression in pop-rock music (see the literature list) gives a personal estimation of how the "Black page" evolved through Zappa's career. On page 148 you can find a couple of bars with a comparison between "The black page #1" and "#2", as the following corresponding bars:



- c) The black page #2, bars 50-55.
- *d) The black page #1, bars 16-18.*

Most notes values have been augmented: dotted and/or doubled or quadrupled (which is why "The black page #2" has that many more bars). The more complicated rhythmical figures have been replaced by regular ones. In this case the notes from the quintuplet have been substituted by standard quarter notes and quarter notes within a triplet. See the Sheik Yerbouti section for more. With these scores unavailable to the general public, such examples come in handy. It did entice me to check my 1987 New age version example again and get rid of an error.

2.8 The torture never stops

Several sections from different versions of "The torture never stops" turn up elsewhere in this study. The Zoot allures section gives an overview. It's the last one of the four bonus tracks. As it comes to the sections with lyrics, most live versions of "The torture never stops" are performed largely the same, so it's the included solos that make them interesting. Other than on the original album version, Zappa always played a larger solo during this title live.

2.9 The purple lagoon/Approximate



Previous page: The purple lagoon/Approximate. Source: original score (Approximate) combined with transcribed parts by KS (The purple lagoon and notes specific for the 1976 version). Update 2007, deposited at the I-depot, The Hague.

For the Palladium concerts Zappa returned to his 1974 composition "Approximate" in a quite different shape. Here he made use of a second "Approximate" sheet he had written, that only in some bars goes similar to the 1974 version. It's presented below. What you hear on "Zappa in New York" is yet another version of "Approximate", namely a combination of bars taken from the 1974 version and this second sheet as well as some bars of its own. The second half of the 2nd sheet went unused for the album version. This section of the 2nd sheet includes bar 20 with irregular rhythmic groupings and gets played in the online midi file. To make things in this complex composition even more untraceable, the album version gets preceded by and partly played over a bass theme, called "The purple lagoon".



Approximate 2nd sheet. Copy of Zappa's original handwritten score as in the collection of Co de Kloet and posted by him on the net.

Whereas the three Halloween concerts at the Felt Forum where done with the five piece band of 1976, for the four Palladium concerts in the last week of 1976 Zappa augmented the band to 12 members, adding a brass section and two percussionists. Five people get a chance to play a solo on "The purple lagoon", including Zappa himself, who added a studio guitar solo to the live tracks. The others are doing fine, just for the fact that they don't get outplayed by Zappa. To promote these extra concerts, the band appeared on the Saturday Night Live show. "The purple lagoon" was played that night as well. Apart from some instrumentational differences, the notable divergence between the two executions is that the bass during the Saturday Night Live performance doesn't fade out at the end as in the transcription above, but returns to the "Purple lagoon" theme one more time. This happens at bar 9 in the transcription, thus not coinciding with the repetition of bars 1-3 of the "Approximate" theme. The combinations of bars ("The purple lagoon" versus "Approximate") herewith becomes different. Maybe the two Saturday Night Live shows Zappa did, will be available one day via a ZFT release. You can get them via other channels, but I'm not sure if they are legal. Why the bass at the end of the on-line midi file example is drawing back is by itself not clear. For playing this part separately it sounds more complete in the Saturday Night Live version. A possible reason can be that the bass didn't pause here during the actual life performance, but that Zappa mixed it out for some bars to let it be able to re-enter in another manner for the solo part. This solo part sets off with everybody well into it right away. Probably Zappa skipped the introductory bars and a pause in the bass line, the bars before, avoids a caesura to become too big. On Saturday Night Live the solo part begins with Terry Bozzio playing several drum bars, while John Belushi enters as a deranged be-bop

The 2019 5-CD Deluxe version of "Zappa in New York" by the ZFT contains "The purple lagoon" combined with what would become the chorus from "Any kind of pain". The latter song got released by Zappa himself more than a decade later "Broadway the hard way" (see the corresponding section for a description)". Zappa introduces it as a make up for John Belushi not being present during these concerts. Stylistically the diatonic "Any kind of pain" theme is totally unrelated to the atonal frenzy of "The purple lagoon/Approximate". These blocks get separated by a few bars of drum soloing.

ZAPPA IN NEW YORK, DELUXE EDITION

The 2019 "Zappa in New York" 40th anniversary Deluxe edition by the ZFT contains quite some more material from the five concerts, held between December 26-29th 1976. Apart from many alternative recordings, you can find the following titles, additional to the above:

- Peaches en Regalia.
- Penis dimension.
- Montana.
- America drinks (with half of it being newly composed).
- Find her finer (with Gail on stage, taking photos).
- Black napkins (with up to half an hour of soloing).
- Dinah-Moe humm.

The purple lagoon (12-29-76): Be-bop tango section

Of interest are also a number of tracks with Zappa, and occasionally Don Pardo, addressing themselves to the audience. Among them "Jazz Buffs and Buff-etts", where Zappa is explaining what's going to happen in the next song:

"... Now it's time for a song called "The purple lagoon". This is for all the jazz Buffs and Buff-etts in the audience. You'll note that in the middle of this, there are going to be some jazz-type solos, played by various members of our wonderful New York finest horn section, ladies and gentlemen, and, as if that weren't enough, there will be a luxuriant punk-rock type avant-garde bass solo by Patrick O'Hearn. But, the crowning moment of this song will be when Ruth Underwood has the audacity to play the melody of

the "Be-bop tango" on top of a vamp ... I knew we had be-bop tango fans in New York ... all right ... I always knew I could write an unforgettable melody, that's one of them for sure ... anybody who can humm along with the "Be-bop tango" just go and get yourself hospitalized right after the show. She's not only going to play the melody to the "Be-bop tango", but she's going to do it against the vamp from the ... from "Pound for a brown", which we're going to insert in the middle of sort of a uh, musical chairs, thank you, you know what I mean."



Be-bop tango section from The purple lagoon (12-29-76), 12:57-13:23. Transcription: KS (Update Summer 2019, deposited at the I-depot, The Hague), with elements from the 1974-92 score.

When I heard this before ever hearing what would be going to be played next, I fell into disbelief. The original "Be-bop tango" is in 4/4, rhythmically complicated with irregular rhythmic groupings, while "Pound for a brown" is in 7/8. You can hardly play these two pieces on top of each other like that other

than on a computer, nor would it be functional. But that's not what's happening during this part of the song. The vamp is indeed in 7/8, not literally the "Pound for a brown" vamp we're used to, but a variant of it. The vamp itself is in B minor/Phrygian, with figures on B, E and G. Bars 1-11 and 16-17 from the example above are over a B pedal with the overall harmony of the vamp being Bm7. Bars 12-15 are on top of E with the harmonies only faintly audible. The G pedal bars first turn up at 13:49. The "Be-bop tango" melody itself is chromatic, but gets pushed towards a more diatonic environment like this. This 1976 "Be-bop tango" melody isn't the literal 1974 score, but an adapted version, so that it fits better into a 7/8 meter. Most notes of the 1974 melody return, but it's the rhythm that only roughly resembles the 1974 score. See the "Be-bop tango (1974)" from the Roxy and elsewhere section of this study for the original score. Much of it is re-arranged in such a manner that its beats can coincide with a 7/8 meter. Bars 9-10 are inserted, probably improvised by Ruth. So stylistically it's not really a tango anymore, strictly speaking. It's a true new version of this melody, shining yet another different light upon this composition.

The total "The purple lagoon" structure from the 12-29-76 performance again shows a different treatment of this composition. After the atonal main theme it jumps overnight into the "Pound for a brown" vamp (as we know it since "Uncle meat"), with the jazz-type of soloing starting. About half of these solos went into the original "Zappa in New York" album mix. Zappa's own guitar solo was inserted in the studio, as indicated on the album sleeve/CD liner notes.

LÄTHER - BABY SNAKES - HALLOWEEN 77: BOXES AND CONCERT FOOTAGE

LÄTHER (1977 and 1996)

When Warner Bros. took notice of Zappa's deal with Mercury-Phonogram to release "Läther" at the end of 1977 they obstructed its manufacturing, because they by now had decided to release "Zappa in New York" themselves the coming year. Zappa felt infuriated and took the "Läther" tapes to the radio station KROQ-FM. The entire content was broadcast in December in Zappa's presence, where he stimulated the listeners to copy everything on cassette tapes, since he thought that Warner Bros. had no rights to it. In a way you can thus say that "Läther" was officially released with this radio broadcast; everybody who had made a cassette tape recording himself could call himself a legal owner of a limited edition. Historically it is by all means a 1977 project. That bootleggers would seize the opportunity to spread out copies was a to be expected side effect.

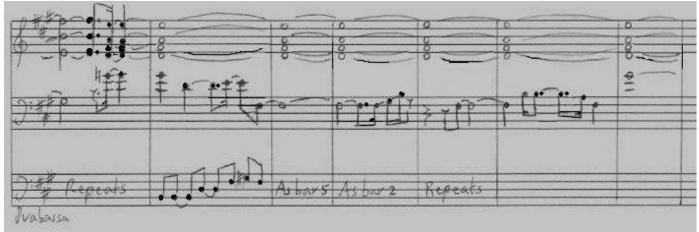
"Läther" got officially released on CD by the Zappa Family Trust in 1996. The included reel content pages show how Zappa had reordered the material, and - which makes it more interesting - that he was already changing the content compared to the W. Bros. tapes (excerpt below to the right with the titles of side one in his own handwriting). The latter makes "Läther" a set that's more than a re-release of the W. Bros records: new songs were added and the two pieces with rearrangements of the "200 Motels" scores were left out. The Zappa Family Trust made a good move by adding some bonus tracks themselves. It makes "Läther", besides being a reissue, also a little new CD upon its own merits:

Duck duck goose - Down in de dew

Pieces unreleased on CD before:

- Duck duck goose
- Down in the dew
- Leather goods
- Revenge of the knick-knack people





Duck duck goose, section. Transcription: KS (update 2005, 3rd printed edition).

The "Duck duck goose" section from above stems from the "Orchestral favorites" sessions. It has a bass motif following the blues scheme in E Mixolydian, over which the orchestra is playing an enlarged chord and some melodic movement. The held enlarged chord is I 9th in bars 2-6 and VII 9th in the remaining bars, played in the form of stacked fifths (plus a third the second time). With these chords being held, the bass following the blues pattern and the lead melody moving freely over it, you get a harmonic field using all kind of combinations of notes from the E Mixolydian key. It's this aspect that makes "Duck duck goose" sound interesting: a combination of traditional blues with modern harmonies.



Previous page: Down in de dew, theme. Transcription: KS (update 2005, 3rd printed edition; bar 5 renewed in 2012).

The opening theme of "Down in de dew" is another example of Zappa's fondness of odd rhythms and metres. Here it's achieved via a larger syncopic figure on beats 3 and 4 of the 4/4 bar and a bar in 14/32. Bar 1 is difficult to assign to a specific key. It tends towards a I-V progression in B during beats 1 and 2, and I-VI in C# minor during beats 3 and 4. Thus I've notated it in B. Bar 2 is in A Dorian, when you follow the bass pedal note, and bar 4 is chromatic. The lead melody in bars 2-5 is played via two rhythmically parallel melody lines. They move in the same manner, though the intervals between them vary. It introduces a guitar solo, which Zappa first used for a promotion cassette called "The Guitar world according to Frank Zappa".

A little green rosetta - Ship ahoy



A little green rosetta/Ship ahoy, section. Transcription: KS (update 2009, deposited at the I-depot, The Hague).

Early versions of pieces released on album between 1979 and 1981:

- A little green rosetta
- For the young sophisticate
- Tryin' to grow a chin
- Broken hearts are for assholes

"A little green rosetta" is a two bar progression, each bar repeated once, over a movement of four chords. It's alternating IV-V-IV and I-IV-I in A. The bass notes of the piano are alternating B and A. It can also be seen as B Dorian, but the progression sounds more like a cadence in A. It's a rather easy basis, fit to improvise lyrics along it. This is done extensively on the "Joe's garage" version. Here the improvisation element is limited to singing around the line "A little green rosetta, makes a muffin feeling better", before the musical progression of "A little green rosetta" gets cut off abruptly for a section from the later "Ship ahoy" solo from "Shut up 'n play yer guitar". For "Ship ahoy" Zappa made use of a guitar effect causing irregular aftersounds. Halfway this solo he temporarily set this effect off and it is at this point that the solo falls in during "A little green rosetta" on "Läther". The transcribed "Ship ahoy" section begins in D Mixolydian (the part with an F#) and continues in D Dorian (the part with F natural). The on-line midi file is from the section with bars without an aftersound. "Ship ahoy" stems from the 1976 winter tour with a couple of shows in Japan. The "Green rosetta" intro must even be older, with George Duke on keyboards. George had left the band in 1975. Both "Duck duck goose" and "A little green rosetta" are smaller collages. The first containing various sections, the second being made up of two blocks. Zappa saying "whereupon the door closes violently" is probably a phrase that got overdubbed later on as a little bridge between the two sections of the collage.

Re-editing and remixes:

There are various examples of forms in which some re-editing and remixing has taken place. The two most notable ones are the original drum parts by Chester Thompson versus Chad Wackerman on the "Sleep dirt" CD. The other one concerns the three original instrumental tracks from the same album, that on CD got a vocal overdub by Thana Harris.

The idea of releasing multi-record boxes lived in Zappa's mind since 1970. "Läther" as a four record set was almost the first to reach the market, with some hundreds of test pressings already made. I haven't heard of anyone with a copy that slipped out before they had to be destroyed. There are some people however who seem to own the first pressing of "Zappa in New York", with "Punky's whips" still on it. Of that one some copies had already reached the stores, before W. Bros decided to withdraw it. The behaviour of this company becomes ridiculous and short-sighted at this point. Even if they didn't care about the content of their records at all, in the long run they would have come out better if they would have let Zappa serve out his contract normally.

Triple records appeared with "Shut up 'n' play yer guitar" and "Thing-Fish", to be surpassed by the three big ones of the "The old masters" re-releases of the MGM and W. Bros. records. These soon became obsolete by the upcoming CD as a new medium. The next big project, the "You can't do that on stage anymore" series of six double CDs, seemed to be pretty massive as it is. The ZFT however has shown that there's much more live material, worth releasing.

BABY SNAKES - HALLOWEEN 77, PALLADIUM, OCTOBER 1977

Baby Snakes was premiered in 1979 as Zappa's second movie. Its core is concert footage. Footage from the sixties would appear in the 1987 "Uncle meat" movie and the "Does humor belong in music" video presents the band from the eighties. The Roxy concerts from 1973 got filmed as well, but went mostly unused till 2015. There are various TV shows that feature Zappa's band. There must be a great deal of material present in the vault. The ZFT has for instance released the "The torture never stops" DVD, taken

from material once used for a MTV broadcast of a Zappa concert. "Baby snakes" opens with backstage stuff, clay animations by Bruce Brickford, some cartoon minutes and then is followed by the Halloween concert at the Palladium from 1977. The movie fared badly in the cinema and got reserved reviews, though it did win a prize at the First International Music Film Festival two years later. In the eighties the film became available on video and more recently on DVD, so maybe it's getting a second chance. Personally I find it excellent. What Bruce is doing with the clay is fascinating and the concert goes on fine. The crowd was enthusiastic and the interaction with the public worked out well. Literally physical during the "Black napkins" solo, touching the hands of people in the front row, and caressing a girl with the letters Zappa written on her forehead during "Disco boy". Zappa thanked them explicitly with "I have to say this, I really appreciate this".

Punky's whips

In 1983 a soundtrack was released on album, premiering "Punky's whips", the song that Warner Bros. wouldn't include in their "Zappa in New York" version. He made no secret about his problems with Warner Bros. when performing "Titties and beer": "I've been through hell. I was signed to Warner Brothers for eight fucking years". Former Mother of Inventions bass player Roy Estrada returned for making Miss Pinky puke because of Warner Brothers and redoing the vocal parts like he did on "Weasels ripped my flesh". He's in the movie, but not on the CD.

"Punky's whips" is another example of a multi-theme, multi-rhythm and multi-tempi composition. The transcribed section begins with some normal rock bars in 4/4 and then proceeds with note strings in various odd meters. In the 14/32 and 17/32 bars the band is playing up and down a scale. The 18/32 bar goes in swing time. The 33/32 bar is the weirdest one. The notes are jumping around over an odd rhythm, played by a 9th chord. If you take the low Ab as key note, the scale would be Ab and the notes (9th chord plus the melody) would be forming any combination within this scale. With the next bar, not transcribed here, we get back to normal. Such an odd 33/32 bar functions the better within an environment that, compared to it, is relatively normal. On the DVD Zappa and Adrian Belew show how its energy can make you want to dance. It's both typical and untypical of Zappa. It's typical of him to take such steps and it's untypical in the sense that you don't have examples that do exactly the same. The 1977 version of this section differs from the 1976 version in the sense that the bars don't get repeated and that the instrumentation is different.



Previous page: Punky's whips, section. Transcription: KS (update 2007, deposited at the I-depot, The Hague). Note, after relistening: the Bb and Eb of the chord in the 33/32 bar should have been notated an octave higher.

Jones crusher



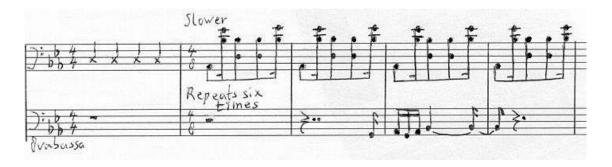
Jones crusher, opening. Transcription: KS (update 2006, 3rd printed edition 2007).

The "Baby snakes" CD is a live compilation without songs that today are unique for this release. All pieces are different versions of songs that appeared on other CDs as well. The example below from "Jones crusher" for instance premiered on "Sheik Yerbouti", using the same basic tracks from 1977. The "Baby snakes" version begins with hammering on an E-A-D chord by the guitar for 8 bars. The bass E pedal note sets the scale to E Mixolydian. Compared to "Sheik Yerbouti" the bass is more in the foreground of the mix and the bass riff of the "Baby snakes" version only appears during the second time the verse gets sung on "Sheik Yerbouti".

The transcription represents the opening plus the first two themes from this song. For the first theme the bass follows the C#m7 chord and the rhythm guitar keeps pulsing the E chord, both in fast triplet time. Both the melody and the keyboard harmony also make use of the remaining notes of the scale. The second theme begins with the 3/4 plus 4/4 bar with now everybody following the same chord progression: G-A-D-A-A. It's followed by three bars in reggae style. The bass alternates B and E in a regular manner, while the other accompaniment picks either just the E (accentuated) or the D chord in an irregular order. Via the 6/4 bar we are led back to the first theme.

Conehead - Basement music #2

The Movie/DVD version of "Baby snakes" contains two smaller disco references. Track 16, "Conehead", opens in a peculiar way. Zappa introduces it as "Watch me now because the name of this song is Conehead. One, two, three, four". Then "Conehead" does indeed start on the next beat with a vamp, though not in the same tempo. Possibly this vamp is a tape playing. On the DVD it's not clear who's doing what. Patrick O'Hearn is pouring himself in some Heineken beer, if I'm not mistaken, and gets out of the picture when the bass part starts. Terry Bozzio is playing the drum part, vaguely visible in the background. Adrian Belew is holding his guitar, though I don't think he's the one playing the vamp. The chord progression in rock terms is Ab2-Bb 3rd. The pedal note at first appears to be Ab, but this one gets overruled by the bass lick, which sets the pedal note to Bb. The progression in traditional terms then becomes VII 9th - I in Bb Mixolydian. It's a disco type of vamp like the one for the "Black page #2", also with a clear downbeat, but otherwise off beat. On the DVD it fades out for an interview with Adrian. According to the bootleg collectors the 1977 "Conehead" piece was an instrumental with Zappa playing a solo over the vamp. In 2017 the ZFT released all six concerts from the Palladium, 1977. So now you've got the chance to not only hear the vamp, but examples of the complete solo. When I transcribed the vamp, I had no idea of the piece as a whole. With the entire song at your disposal, you can hear that two 4/8 bars can better be combined as one 4/4 bar and everything can be notated as a normal rock song: the bass and drums are using 4/4. Still the vamp is strongly syncopic and, to a lesser degree, the bass too. It also comes out that the bass is part of the vamp. The second example contains the first eight bars with Zappa soloing. A peculiar thing is that the guitar part sometimes sounds as if it's made up of two melodies, played at once. This is also happening during "Bowling on Charen" (see below). So I needed two staves for notating it. I don't have a clue of how you can create such effects. I just notice it and try to notate what I hear.



Previous page: Conehead vamp (1977). Transcription: KS (update 2008, deposited at the I-depot, The Hague).

See the main text and the next example for how two 4/8 bars can be combined as one 4/4 bar. This is something that came out when the ZFT released the entire song.



Conehead instrumental, 0:57-1:29. Transcription: KS (update 2018, deposited at the I-depot, The Hague).

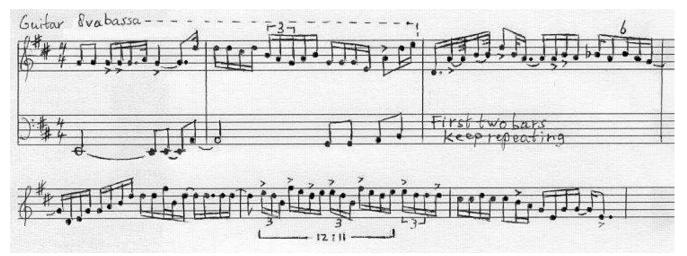
Now it has become clear that there is no connection with the 1978 song, that's called "Conehead" too. Zappa just used the same title for two different pieces of music. Above a screenshot from Zappa's appearance at the Saturday night live show, with the idea of fictitious conehead people being visualized. Following next is the opening and a section of the guitar solo from "Conehead", as present on the 1978

"Saarbrücken" bootleg from the "Beat the boots" series. The solo is using the opening bass theme of the song as a vamp. The bootleggers were using the speed knob here, the pitches aren't constant. At 1:51 it jumps to another fragment of the solo with the speed and corresponding pitch a half second lower. The first block is in F Dorian with the bass alternating F and Bb. Syncopically in bars 1-4, on beat when Zappa starts singing. The harmonies in the opening bars 1-4 are a blend of I 7th and IV. Staffs 2-4 begin with playing I 7th, while staff 1 already has the upcoming IV chord as sustained notes. In the second part the key becomes E Dorian. Zappa is now soloing over the bass lick as played in the opening bars.



Conehead (1978), opening bars. Transcription: KS.

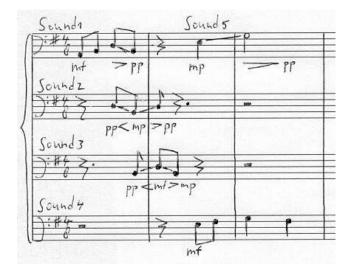
Both sections: update 2008, deposited at the I-depot, The Hague.



Conehead (1978), solo section. Transcription: KS.



Frame of Basement music #2, opening bars. Transcription: KS (update 2008).



Previous page, bottom: A further detailing of staff 1, first three bars, with the synthesizer type of shifting sounds, volumes and glissandos. Transcription: KS.

Next to the two examples from the following Sheik Yerbouti section, the two "Basement music" instrumentals are another instance of some disco influence. Zappa recorded this music in the basement of his house in 1978 using a synthesizer. The disco aspect lies in the mechanical drum part that the rhythm box produces, a bar repeated identically all through as often done for disco. Only the accentuated beats fail for actually calling it disco. Both "Basement music" pieces are specifically synthesizer music, in the sense that the instrument is used for modifying a tone after it is initially entered on a keyboard: the tone changes, the pitches are in glissandos and the volume keeps changing. This makes it very difficult to reproduce it literally. In a transcription you would need various staves to represent different sounds and you would have to lead the melody over these various staves, making it sort of unreadable. Secondly you would need very strong editing equipment to be able to play it, including the undaily sounds that synthesizers produce. If you play the notes straightforward on a midi editor as above, the result is disturbing. It still sounds nice, but leaving out the synthesizer sound and sound effects makes the piece as good as unrecognizable. For that reason I chose for the word frame above, rather than calling it a good midi representation of the original. In that sense the "Basement music" and various pieces on "Civilization phaze III" are untypical of Zappa, because you can play about all of his music on any instrument and it still would be immediately recognizable.

"Basement music #1" got released on "The lost episodes" from 1995, whereas "Basement music #2" was first used as background music for "Baby snakes". The original recording got included in the ZFT release "Quaudiophiliac". "Basement music #2" is untypical of what Zappa was doing at that time, not only for its mechanical drum part, but also because of the specific use of synthesizer effects and the way it's composed. Here you can hear that Zappa was always interested in side-steps and new directions for his music, eventually leading to his last CD, "Dance me this", coming out as yet another surprise. The transcribed section above of "Basement music #2" doesn't have pedal notes. The melodic accent during bars 1-6 lies on D, so one might call it D Mixolydian.

Bowling on Charen

"Bowling on Charen" stems from the October 28th concert from the 1977 Palladium series. It's the oldest track on the "Trance-Fusion" CD, released in 2005 (see the corresponding section). With the "Halloween 77" release, you can hear that this solo was part of a lengthy "Wild love" performance, including a number of rather unrelated solo blocks. They could be released as separate tracks too. The "Bowling on Charen" solo by itself is made up of three blocks. Specifically the coda is more pre-conceived than usual.

- 0:00-1:04 Opening block. The solo opens with a series of variations upon a theme as presented in bar 1 from the first transcription below. What's notated as a pick-up bar isn't really a pick-up bar, but the incomplete closing bar from the preceding song. Zappa is here using a self-created scale, B-C#-D#-E-F#-G-A/A#. It's a variant upon B Mixolydian with the G# turned to G natural. Both A and A# get used. B as the tonic gets predominantly established by the theme itself, that keeps returning to B as the starting point, while its tail keeps varying. The bass staff represents different instruments: keyboard/sax in the pick-up bar, some background guitar notes during beat 1 of bar 2 and a high B by the bass guitar beginning at beat 3 (pitch notation as it sounds). This is the only note the bass guitar plays during the opening section. The keyboard is using series of dissonant chords as you can hear for instance during bars 3-4 from the transcription below. On beat 4 from bar 7 you have an accentuated B7 chord.



Bowling on Charen, opening. Transcription: KS (update 2013; deposited at the I-depot, The Hague).

- 1:04-4:15 Central block with a bass notes alternation. The second example below shows the transition to and the opening of this block. Via G-A# by the bass Zappa moves over to a B-A alternation in B Mixolydian. From bar 4 onwards the G natural has disappeared in favor of the normal G# from the B Mixolydian scale. If one would step into this section at an arbitrary point one would be more inclined to identify it as an A-B alternation in A Lydian, a more common alternation for Zappa's solos (see also the Shut up 'n play yer guitar section). In this case however, the solo begins on B, the alternation and most specifically the coda end on B. So taking B as the overall tonic is the more appropriate option. A peculiar phenomena to notice is that Zappa at some points manages to sound as if he's playing two melodic lines at once, presented via an extra guitar staff in the example below. Specifically in bars 5-6 you've got two points with two melodic fragments sounding simultaneously. It probably stems from a combination of picking notes and a guitar effect (it doesn't sound like a second guitar or an overdub). The theme from the opening block returns during 2:22 through 2:35.

Presented two pages ahead is the second half of this ending block. The chord progression used here is:

- bar 1: transition to the second half of the coda with I-VII-I in B Mixolydian.
- bar 2: beat 4 of bar 1 and beats 1-2 of bar 2 contain an extended harmony. Zappa plays in an arpeggio manner over what you could call I 9th from B Mixolydian, while the bass gives an A. Zappa loved applying such wider harmonies (9th, 11th and 13th chords) next to standard chords, giving him a sense of total harmonic freedom. On beats 3-4 Zappa lands on simply the A chord.
- bar 3: beat 1 is the Bm7 chord, beat 2 the E chord and beat 3 the B chord (plus an E by the bass).
- bar 4: beat 4 from the previous bar plus this bar use the chords from bar 2 again. The bass notes are different, widening the harmony. The A chord in this case gets extended with a D# by the bass.
- bar 5: beats 1-2 can be identified as for instance Asus2 plus F# or I 11th from B Mixolydian. On beats 3-4 Zappa reaches his final chord: simply B or the I-chord from B Mixolydian. The bass begins melodically, but also moves to a final B at the beginning of bar 6. At the end of bar 6 and the following bar (cut off a little before its end and not included anymore in the example above) feedback notes get the upperhand and the bass seems to hint at the next song.



Bowling on Charen, section. Transcription: KS (update 2013; deposited at the I-depot, The Hague). Note: the 8va notation in staff 3 stems from the fact that I misheard a couple of chords for an octave at first.



Bowling on Charen, end. Transcription: KS (update 2013; deposited at the I-depot, The Hague).

Sheik Yerbouti - You are what you is (1979-1981)

With Sheik Yerbouti took a major leap in improving the sound quality of his albums. The release became his best-selling album with Bobby Brown becoming a big hit in some European countries. The lyrics got in the way of this single becoming an international hit. Joe's garage deals with a hypothetical situation where a government is prohibiting music, with the main character Joe winding up being able to play music in his mind only. The album ends with the touching solo Watermelon in Easter hay. Tinsel town rebellion is a selection from recent live recordings. The growing importance of guitar solos in Zappa's output culminated with the box set Shut up 'n play yer guitar. You are what you is a one of Zappa's more accessible albums with for instance country, rock and even a gospel song.

SHEIK YERBOUTI - HAMMERSMITH ODEON: DISCO REFERENCES AND SOLO BUILDING

When the "Zappa in New York" concerts were given, disco music had become very popular on the dance floor and this wasn't just a hype, but to last up till today under different style names and new variants. Disco is characterized by steady beats or rhythmic figures, played throughout the whole song. Because of its steadiness, the beat is often played by a drum machine or computer. Some people thought that disco was a way of making dumb pop-music, but it also depends upon what you build upon the steady figures.

The black page #2

One of the funniest things Zappa ever did is playing the rhythmically erratic melody from "The black page #1" from the Zappa in New York section again, modified by adapting the rhythm, against such a steady disco figure. Here it appears in the form of "the disco vamp" played by the bass and it is commented upon in the preamble to the piece (a vamp stands for a continuingly repeated accompanying motif). There's also a relationship between "The black page #2" and the guitar solos using vamps (see the "Shut up 'n play yer guitar" and "Guitar" sections). This disco version, "The black page #2", opens with the following bars as a variation upon bar 1 from "The black page #1" from the In New York section:



The black Page #2, opening bars. Source: original score, with the vamp added by KS.

When you compare these bars with the opening bars from "The black page #1" you can see and hear that the notes values have increased, as well as that the quintuplet has been replaced by a half note and four dotted quarter notes. There are also some minor melodic changes. So this is indeed an easier version to perform than "The black page #1". On this occasion there are sometimes sustained harmony notes being played in the background: a G-chord during bars 1-4, followed by a Bbsus2 chord during bars 5-6. See the Zappa in New York section from this study for a second example.

In general the influence of disco upon Zappa's music remained marginal. Some other references to disco in his music are described or mentioned below at tracks 15 and 17 from "Sheik Yerbouti".

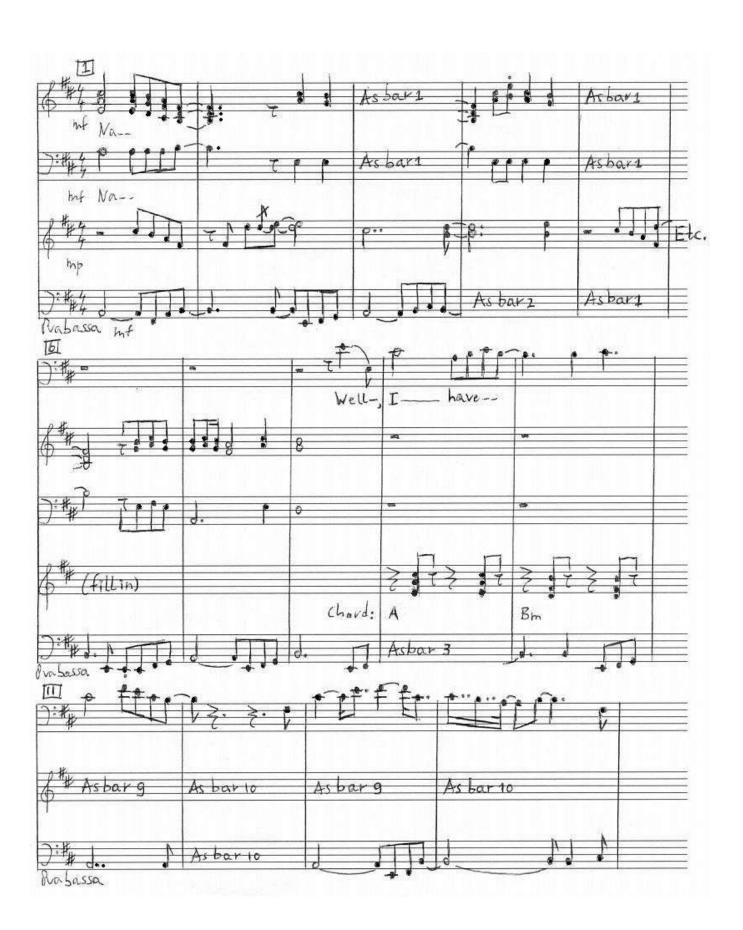
SHEIK YERBOUTI

With no access to studio facilities during 1978, Zappa kept on touring and recorded the live tracks for "Sheik Yerbouti". In 1979 he had his means re-arranged with CBS and Phonogram as distribution companies for Zappa Records and his own recording facility. "Sheik Yerbouti" was finished by adding studio overdubs to the live tracks. It was a major leap in improving the sound quality. Even by today standards the album still impresses and it gave Zappa a reputation as a producer. The inner sleeve contains a photo by Gail with Zappa's hand at the control panel with the indispensable cup of coffee and cigarettes next to him (outtake to the right). You can also recognize his handwriting on the control panel labels. "Sheik Yerbouti" has become his best-selling album, including accessible songs as the hit single "Bobby brown", as well as some technically impressive material. On the album Zappa presented himself self-confident as ever, ridiculing our occasional problems in songs like "Broken hearts are for assholes".

1. I have been in you

The "Sheik Yerbouti" version of "I have been in you" opens with a partially overdubbed chorus, with the descant singing along I-VII-VI-II in A Mixolydian. The lower bass singer (staff 2) and the bass guitar (staff 4) are giving a counter melody. When Zappa begins singing the verse in bar 8 it becomes slow reggae with at first a I-II alternation. In bars 15-16 the chords are IV and I with C natural. At various points Zappa sings slightly off beat, letting the speech lengths of the syllables prevail.

The Hammersmith Odeon version of "I have been in you" opens as a romantic love song. See below for more about the "Hammersmith Odeon" CD, here abbreviated to H.O. The band is vamping in a relaxed tempo along a I - II 7th - V 11th progression in A Mixolydian. Zappa had made the "Is that guy kidding or what" intro from two months earlier at the Palladium a returning event. This intro has now become longer. Zappa keeps changing the angle to the subject he's talking about, making it impossible to determine at what point he is sincere. The song has its romantic episodes but can also be utterly banal. It's all one big joke. At one point he speaks about someone like himself as "assholes like me with the big record company contracts". Then you can consider what the status of his contract with Warner Bros. had become. Literally it's about a punk star that the female fans adore so much that they put safety pins on their face just to be like one themselves, just as "Titties and beer" isn't literally about Zappa, but about a biker. "Is that guy kidding or what" is more to the point. You can look up the album cover of Peter Frampton's "I'm in you", with him with his bare chest, and ponder upon that. Songs as the Hammersmith version of "I have been in you" or "Broken hearts are for assholes" aren't cynic about love songs, but destructive. It wouldn't stop him from singing "Love of my life" again on "Tinsel town rebellion", writing "Doreen" for "You are what you is" or covering "The closer you are" on "Them or us".





I have been in you, opening. Transcription: KS (update 2011, deposited at the I-depot, The Hague).



I have been in you (H.O.), opening bars. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

2. Flakes





Flakes, 2:19 till 3:05. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

Within its concept "Sheik Yerbouti" demonstrates an exquisite sense of humor. It's making fun of everything even when it can get at your own expense. The latter topic rises when you lay "Is that guy kidding or what?" from "YCDTOSA VI" next to "I have been you". A lot of people won't know that it started out as a reaction upon Peter Frampton's single "I'm in you". When you take sentences as "I'm going

in you again" or "ram it up your poopshoot" apart however it's merely a rude way of expressing yourself. The popularity of "Sheik Yerbouti" is due to the use of chord progressions, that are easy to grasp, and catching riffs in the majority of the tracks. The song on the album with most hit potential, "Bobby brown", could have been a bigger hit if it would have had more common lyrics. "Flakes" includes a funny Bob Dylan imitation. The latter saw no harm in it, as had Punky Meadows before him found that "Punky's whips" was amusing. The set-up of "Flakes" goes as:

- 0:00 0:14: Opening riff, played 4 times.
- 0:14 0:25: Theme 1 ("They don't do no good").
- 0:26 0:35: Theme 2 ("California got the most of them").
- 0:35 0:44: Theme 3 ("Swear to god they got the most"), played 2 times.
- 0:45 0:51: Opening riff, played 4 times.
- 0:52 1:03: Theme 1 ("they can't fix your brakes").
- 1:03 1:12: Theme 2 ("they're lying and lazy"), now with low vocal harmonies.
- 1:13 1:21: Theme 3 as above.







Flakes, 5:28 till 5:55. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

1:22 - 2:38: 8-bars "Bob Dylan" imitation theme, played 4 times.

The transcription below starts with the last time this sequence is played. Adrian Belew (later on Ed Mann) is impersonating Bob Dylan in a perfect way. Not only can everybody immediately recognize Dylan's tone of voice, the details are taken care of really good. There's the harmonica notes and there's an F natural instead of F sharp, imitating Dylan's habit of sometimes singing flatly. The bass chord progression, here in D, goes as I-II-II-I-IV-V. The others are following this progression with some liberty. Bars 7-8 are specific for the 4th repetition and form a bridge to the next instrumental part. To the right a screenshot from the Torture never stops CD, featuring percussionist Ed Mann, who would take care of the Bob Dylan part during the 1981 tour.

2:38 - 2:56: Instrumental variations upon theme 3. The one bar chord progression, here in E, goes as I-IV-V. The keyboard player is improvising over this progression, taking over the I chord and the rhythm of the progression at the beginning of most of the bars, but otherwise moving freely. In all probability it's Tommy Mars. He plays in this song on "Sheik Yerbouti" as well as on the "Torture never stops" DVD. On both occasions there were two keyboard players in the band. On the DVD the camera focuses on Bobby Martin, where you see that he's busy with a harmony chord, so Tommy Mars must be improvising the lead melody at least on this occasion.

2:56 - 3:41: Sung section ("I'm a moron") over a 2 bar motif played on percussion and bass. This riff in E goes as I-V-IV-I. The transcription stops at the onset of this section.

3:41 - 4:32: Sung section continues ("Well my toilet went crazy") over a 2 bar guitar riff.

4:33 - 6:41: Outro theme repeated till the end, preceded by a chorus intro. The four-bar progression of the chorus in bars 1-8 is in E Mixolydian and goes as I-II-II-I-VII-IV-I-VII. When you consider the whole chord of all notes sounding at the beginning of bar 4 it becomes a bigger chord, namely I 11th. Apart from the VII chord of the chorus you've got the bass E pedal note and the B of both Zappa's sung lower harmony notes and the second feedback guitar. For a moment there's also a G sharp in the first guitar part. Zappa liked adding in such extra notes enlarging the harmony. When he starts singing the lyrics in bar 9 the progression gets reduced to a two bar theme with two alternating chords: I and IV. The bass plays a steady on beat E pedal note all through.

The specific "Flakes" version from the Hammersmith Odeon collection evidently wasn't used for "Sheik Yerbouti". Not only are the details different, the structure of the song is different as well. After the Bob Dylan section everything continues instrumentally. First you've got a keyboard solo over the first vamp. The keyboard sounds as an electric violin at this instance. I can't tell if it's Peter Wolf or Tommy Mars. Next Adrian Belew plays a solo with Zappa playing the chord progression. Then Zappa himself takes over the soloing over the final chord progression.



Flakes (O.H.), 3:34 till 3:46. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

Presented above is a section from the keyboard solo. The vamp goes slightly different with some more notes to it. Comparing "Hammersmith Odeon" to "Sheik Yerbouti" gives you some insight in what the overdubs added. In the case of "Flakes" it's the extra vocal parts and feedback guitars. Possibly also a doubling of the instrumental parts. Zappa used methods to improve the sound quality, of which I have no knowledge. You can hear that the use of the stereo field on "Sheik Yerbouti" is better developed than on the live multitrack tapes when you play them as they are, as is probably done on "Hammersmith Odeon".

3-4. Broken hearts are for assholes - I'm so cute

These two pieces are accessible rock-based songs. "Broken hearts are for assholes" got first recorded during the "Läther" sessions. It's one of the extras on the "Läther" CD as released by the ZFT in 1997. "I'm so cute" ends with a heavy use of synthesizer effects. When this title re-appeared on CD, Zappa decided to shorten this section. It now lasts 3:09 as opposed to the 4:20 minutes on the vinyl album. There are remixes and sometimes extensions on about all CD re-issues of Zappa's albums without significantly changing the content, but here you've got something drastic. The only other example is the skipping of "Willie the pimp, part 2" on "Fillmore East". Apparently he was less fond of these sections later on and musically they might indeed be considered less relevant.





I'm so cute, 0:30-0:46. Transcription: KS (update Spring 2018, deposited at the I-depot, The Hague).

Both "Broken hearts are for assholes" and "I'm so cute" are using a guitar riff for their first theme. The latter is represented in bars 1-4 of the example above. It's standard rock in a 4/4 meter, using E minor or Dorian (the C/C# that makes the difference isn't used). Next you've got the second theme, applying a progression of parallel major triads: D-A-G-C. This is something Zappa does more often and has been spoken of in for instance the Freak out! and YCDTOSA vol. II sections from this study. The effect is that theme two isn't stable in one key. This theme ends with the figure from bars 11-12, using Bm-E-C#m as progression, still not confirming a key or tonic. After the repetition of theme two, a third theme in A Mixolydian begins at 1:01 (not included in the example from above). Next the song returns to theme one with the chords being sung as well ("a ren-nen-nen ...").

5. Jones crusher

The same basic live tracks of "Jones crusher" were used for the "Sheik Yerbouti" and "Baby snakes" CDs. The overdubs are making the difference. The "Baby snakes" version is included in the corresponding section of this study.

All tracks for "Sheik Yerbouti" have these basic tracks being recorded live with many studio overdubs added to them for the album. They mostly stem from the 1977 fall tour and the 1978 spring tour. "Baby snakes" and a couple of ZFT releases make it possible to compare these versions to the 100% live recordings. On "Chicago '78" you can for instance hear how heavily the vocals got overdubbed during "Yo' mama", as well as the keyboard bridge that precedes the guitar solo.

6-8. What ever happened to all the fun in the world - Rat tomago - Wait a minute

At the end of the eighties recorded a number of monologues and dialogues, from which he could use snippets as connection elements between songs. This is done consistently on "Shut up 'n play yer guitar". Here two of them carry their own title. In between them stands "Rat tomago", a pedal note guitar solo in Bb Dorian. It got recorded at the Deutschland Halle in Berlin on a four-track recorder. Zappa apologizes for the relatively lesser sound quality in the CD booklet, still being reasonably good. The reason must have been that he quite liked this solo. Since he recorded all concerts, he could easily have picked another one. The same happened on "Roxy and elsewhere", where he included two solos that are in mono.



Bars 1-9 from Rat tomago (sample from The FZ Guitar Book). Transcribed by Richard Emmet.

A transcription by Richard Emmet of "Rat tomago" is included in the Frank Zappa Guitar Book, pages 275-280. Zappa frequently changed the speed of his recordings, mostly speeding tracks up. See also the We're only in it for the money section from this study at "Lonely little girl". Here you can see that Richard transcribed the solo from the original tape. It's notated in A Dorian, while the CD has it sped up to Bb Dorian. The bass pedal is indirectly indicated by the Am11 chord. On other spots in the Guitar Book the key is mostly getting directly mentioned. According to Greg Russo (see the left menu at Live recordings) it's an outtake from a "The torture never stops" performance. This is very well possible, since Zappa played this title live in A Dorian. See my The best band you never heard in your life section for an example. Greg's book also contains a gigs list, so the date of the Deutschland Halle concert can be specified as February 15th, 1978.

9. Bobby Brown goes down

Zappa released several singles during his career, a few becoming marginal hits. "Bobby Brown goes down" is his only true hit, though only in some European countries. This song is available in three versions, that don't differ significantly:

- The "Sheik yerbouti" version was recorded at the Odeon Hammersmith in 1978 with a lot of studio overdubs.
- In this study the "Does humor belong in music?" version of "Bobby Brown" is being dealt with in the corresponding section. Two examples are included. One with the transitional bars between "He's so gay" and this song, the other with the main theme. This is an entirely live recording from the The pier concert,

New York, 1984. It's included in the DVD version of "Does humor belong in music?" only.

- Another 1984 live recording is included in the "YCDTOSA" series, vol. III.

Around 1979 Zappa was a well-known artist, who didn't need a hit to get people to be familiar with his name. He had a reputation for being non-conformative and the lyrics of "Bobby brown" certainly fit into this. It's about a sexual degenerate, mocking the American dream. It got in the way of the single becoming an international hit. With hindsight it better could have had mainstream lyrics, that couldn't offend anybody. Today you've got a new generation of people listening to pop music and it helps being included in playlists to get the average listener to know you. To the left an outtake from the album front cover. Like "Uncle meat" this album didn't have his name on it. His face was sufficient to identify the artist and some people might also recognize his handwriting in the album's title. He's peering at you in an intense manner. A more friendly photo from the session can be found on page 73 from the Dominique Chevalier book.

10-11. Rubber shirt - The Sheik Yerbouti tango

In the CD booklet Zappa explains how "Rubber shirt" was constructed by applying what he himself called xenochrony. The bass track and the drum track were recorded separately. They were put on top of each other by using a re-synchronization technique, creating the illusion of being played together. He also states that this was done during "Friendly little finger" and "Yo 'mama". It is known that he applied this technique intensively on "Joe's garage". In this case there's one example from "On the bus" in this study, where you can actually see on paper how xenochrony worked.

During his life, Zappa wrote two tangos, amply dealt with in the Roxy and elsewhere section of this study. "The be-bop tango" is a modern type of tango with irregular rhythmic figures and harmonically being somewhere between multi-scale and atonal. "The Sheik Yerbouti tango" is a more traditional tango. It's an improvised guitar solo over a tango-rhythm figure, mingling diatonic melodies with the use of the whole-tone scale.

12. Baby snakes

"Baby snakes" is a compact song. Though only lasting 1:50 minutes, it contains four themes. Only during the coda the first theme returns, the other themes don't return at all:

0:00 Theme 1 in E ("Baby snakes ...").

0:41 Theme 2 on step VI of E ("They live in a hole ...").

1:01 Theme 3 on step IV of E ("Maybe I think ...").

1:20 Theme 4, a little instrumental interlude. Here the music modulates to a I-VII-VII progression in C Lydian. This progression gets played five times, with the example from above beginning with the last two repetitions. What used to be one beat, now gets subdivided into six, which is why I notated this section in 24/16.

1:40 The opening of theme 1 returns to form a coda. Bars 5-8 are the same as at the beginning. Bars 9-10 are a variation. The tempo is slowing down and the song ends with a deceptive cadence, namely with a D7 chord instead of going back to E.





Baby snakes, end. Transcription: KS (update Spring 2017, deposited at the I-depot, The Hague).

13-14. Tryin' to grow a chin - City of tiny lites

Both these songs are available in earlier versions as well via ZFT releases. "Tryin' to grow a chin" is also included in "Läther". The outlines of the song remained the same for "Sheik Yerbouti", being sketched in the Ludwig study, page 226 (see the references). Reproduced below are the characteristic bass riff of theme 1 and the melody of the chorus, that ends the song. The chords to be heard over the bass riff are D and A alternating in bars 1-2, next C and G alternating during bars 3-4. The keys thus switching between D and C major. The chorus ("I wanna be dead ...") is using E-B-F# as chord progression. At first hearing it appears to be in E Lydian, as also Ludwig has notated it, but it's actually a parallel playing of three major keys. This you can hear the best by the bass part from 2:16 onwards. The bass goes from the E to the B chord by playing E-F#-G#-A-B, thus following E major over the E chord. See also above at "I'm so cute" for another example.



"City of tiny lites", on the other hand, goes pretty different from the 1976 version that you can hear on "Philly '76". Both versions are being dealt with in the Philly '76 section of this study. Zappa himself released two more live versions on "YCDTOSA vol. V" and "Make a jazz noise here", briefly described in

the Philly '76 section. The ZFT released two other editions. The ones on "Halloween 77" and "Hammersmith Odeon" have a solo over another bass vamp doing F-G (sustained), followed by C-B as chords on the second CD. Thus also being a G minor type of thing, G Dorian like the Santana vamp solos. The basic tracks for "Sheik Yerbouti" stem from these Hammersmith Odeon concerts, so understandably these two recordings sound alike, but the solo got skipped for the album. While all other songs on "Sheik Yerbouti" are direct regarding their lyrics, this one is more poetical. As I understand it, it depicts how people, under the influence of drugs or otherwise, may start to believe how big they are compared to the tiny world around them.

15-16 Dancin' fool - Jewish princess

The encounter with disco in "The black page #2" continued with other references on "Sheik Yerbouti". The theme from "Dancin' fool" has a 4/4 metre with the bass playing C-sharp on beat. It's interrupted by a bar with three times 2/4. Here the beat goes on as a light accent on the B of the bass and low B of the melody and a heavy accent on the high B of the melody. It's reflected in the lyrics as follows (light beats indicated with italics, heavy beats with capitals): "I hear that BEAT, I jump out of my SEAT, but I can't com-PETE". It really sounds as disco for this specific bar. The transcribed section is in C# Dorian with Zappa singing the main theme over C# pedal. The second vocal part in staff 3 and the vibes sing/play a variation upon it along with Zappa. In the 3x2/4 bar the bass changes to B pedal and you've got just the E chord in two positions for the accompaniment.

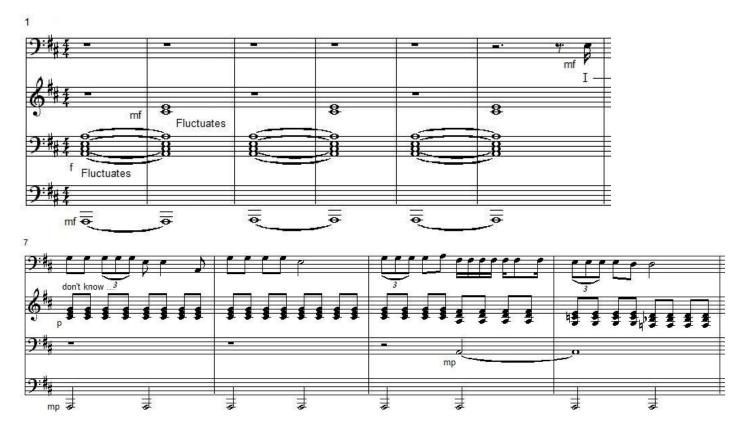


Chorus from Dancin' fool. Transcription: KS (2nd printed edition, 2001).



The verse from "Dancin' fool" as included in the Disco power collection, a songbook published by The big 3 music cooperation. Zappa's song managed to get between Donna Summer's "Last dance" and the disco version of Beethoven's 5th. Seen the footer it's authorized and the score must have been handed over by Zappa himself.

Again you can see that the score and the album go differently. Next are the opening bars from the verse:



Dancin' fool, opening bars. Transcription: KS (update Summer 2018, deposited at the I-depot, The Hague).

- The album version has been transposed down a minor second from Bb Mixolydian to A Mixolydian.
- While the score prescribes a moderate tempo, the tempo on album is fast, as fast as possible when still being able to pronounce the words. The above example with bars 1-10 from the album lasts 21 seconds. The score has no metronome tempo, so I can't get at an absolute time for that version.
- While the score alternates the Ab and Bb chords during the instrumental opening bars (for 4 bars), on the album it's just a sustained A chord (for 6 bars).
- The rhythm of the lyrics goes slightly different.

Otherwise these two versions are basically the same. Both have a bass pedal note during these bars and (apart from the transposition), they are using the same chords. The combinations of the bass pedal note and descant triads create larger chords for the whole. In the score this gets indicated as for instance Ab/Bb, here meaning Ab add Bb. These chords involve various altered notes. Only nominally the verse might be called Mixolydian.

As Zappa might have expected, and probably aimed at, the provocative lyrics of "Sheik Yerbouti" got just as much attention as the music. In case of "Jewish princess" some people found it discriminating. Zappa defended himself by saying these women exist, in this case standing for Jewish women who are playing hard to get.

17. Wild love

Another reference to disco is the accompaniment at the beginning of the instrumental section of "Wild love", given beneath. It reflects the love for repeated rhythmic figures in disco. First the rhythm guitar plays such a figure during bars 1-8. As the melody begins the bass guitar joins in with another figure during bars 5-11. Notable is the free use of eighth and sixteenth notes in all the parts, rather than following a strict 4/4 division (the same happens in Echidna's Arf from the Meters section). It's an example of speech-influenced rhythms, as already noted in the In New York section. The first four bars of the transcription are in B. When the main theme returns instrumentally in this song, the bass lick sets the key to A Lydian. Bars 5-8 and bars 9-11 are variations upon each other.



Wild love, opening of the instrumental section. Transcription: KS (2nd printed edition, 2001).

Something you'll accidentally notice during transcribing, unless you're heaving a perfect absolute hearing, is that it is a sped up track: the frequencies are out of tune with keyboard frequencies. Other examples of

pieces with steady rhythmic figures are the title track from "You are what you is", "He's so gay" from "Thing-Fish" and, embedded in an orchestral environment, the disco section (so called in the album liner notes) from "Pedro's dowry" on The London Symphony Orchestra recordings. Disco-like are also the "How could I be such a fool" (1976 version) and "Dance contest" examples from this study, with bars with the typical four-on-the-floor drumbeats.

The global structure of this piece can be followed in the study by Wolfgang Ludwig, who transcribed all lead melodies:

- 0:00 Instrumental intro. The lead melody begins with F#-G#-G#-A#. Next the bass joins in with a counter movement, B-A#-E-F#. At this point the tonic isn't outspoken. It could be called F# Mixolydian or B. Interrupting bars as bar 9 are happening all through this composition.
- 0:16 Theme 1 over an F# bass pedal. The key becomes F# Dorian.
- 0:31 Theme 2. The bass plays along with the sung melody. The meter has changed from 4/4 to 6/8, while the key becomes B Mixolydian.
- 0:45 Theme 3 in Bb. A pretty drastic key change.
- 0:53 Everything repeats twice from the beginning, sometimes re-arranged. The instrumental opening now begins over an E pedal, the key thus being E Lydian.
- 2:48 Interlude with irregular rhythmic groupings.
- 3:19 Disco section as described above. The themes return instrumentally. As you can see Wolfgang is indicating eighth different tempos during this piece.
- 4:08 End.







Previous pages: Wild love, themes. Transcription: Wolfgang Ludwig.

18. Yo' mama - Mo' mama





Yo' mama, 1:22-2:52. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

The "Frank Zappa Guitar book" from 1982 contains one solo that hasn't been released on album, called "Mo' mama" (the opening is presented below). It's named this way because it follows the same basic

architecture as the grand "Yo' mama" solo from "Sheik Yerbouti". The structure of "Yo' mama" in total goes as:

- 0:00 Instrumental opening in A minor with first just the I chord being held. Next the vibes play along I 11th and the keyboards make a V-VI-V progression.
- 0:21 Theme I, continuing in A minor ("Maybe you should...").
- 0:49 Theme II in E Mixolydian ("You ain't really...").
- 1:02 Theme III in C Lydian ("Cause if you...").
- 1:09 Theme I.
- 1:22 Theme I with vocal overdubs, starting with the transcription below. The vocals are now made up of four to five parts. One or two parts for the lead melody plus three parts with the same notes repeating (A, D and B).
- 1:36 The band jumps overnight into an instrumental interlude in E Mixolydian, thus following the key change from theme I to theme II. A second relationship with the sung part is established retrospectively in bar 9, the point where Zappa is briefly in C Lydian with theme III being played instrumentally in staff 3. The interlude starts with mingling chords from E Mixolydian. The bass and the upper descant staff do the E chord, over which the others play D-F#m-E-Asus2 etc. It sounds overwhelming, partly because we know what becomes of it: a monumental solo in E Mixolydian.
- 1:57 Solo in E Mixolydian with just the E for the bass as a sustained note, buzzing in the background. The keyboards do a harmony fill in, sometimes vague and hard to distinguish, at other points better recognizable.
- 4:02 The drummer joins in. The bass becomes a normal improvised bass, still E pedal.
- 5:25 The bass plays a little slow melody: B-C#-D-A-B-C#-D-E.
- 5:42 E pedal again, improvised.
- 6:03 Sustained E again.
- 6:41 Section moving towards the chord alternation part. The bass begins with a downwards melodic line: B-A-F#-C#-D. The second transcription below begins at 6:47 over a B pedal note with the band settling for a plain 4/4 meter.





Yo' mama, section. Transcription: KS (2nd edition, reprint 2003).

- 6:54 The solo evolves into a V 7th and I 5th/7th (B and E) chord alternation of E Mixolydian.
- 10:05 Pre-arranged ending of the solo.
- 10:23 The guitar plays theme III, neatly moving back to the sung part.
- 10:30 Theme I.
- 10:57 Theme II.
- 11:10 Theme III.
- 11:16 Theme I sung without lyrics.
- 11:40 Closing progression in D Mixolydian. The bass plays E-F#-D a couple of times with the keyboards playing the progression D-Em-C over it. Combined and seen from the tonic it thus ends with I 11th.
- 12:04 After Zappa has given the band members their credits, they seem to resolve the I 11th chord by letting the bass move from D to C. Yet a second keyboard plays a D chord over it, so it still remains mixed.
- 12:35 End

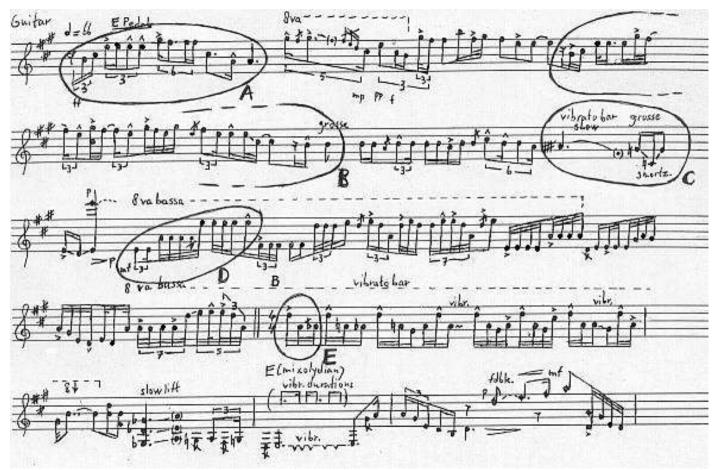
The "Mo' mama" is an example of a solo that sets off with a lick followed by immediate improvisation, whereas solos as "The deathless horsie" or "Watermelon in eastern hay" have a larger preset theme. Not everything that's in the transcription is properly reproduced in the on-line midi file; the two quarter-tones are for instance approached by a minor second chord for lack of better (my midi editor can't represent quartertones).

The "Mo' mama" example is the opening of the solo including all of the pedal note part (a lot shorter here than in "Yo' mama") and the beginning of the chord alternation. The second "Yo' mama" example from above, that I've tried to transcribe myself, also includes this transition. It commences with a sequence moving towards the chord alternation part.

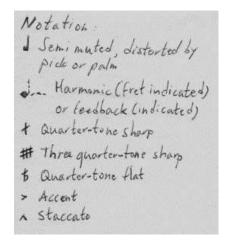
In the file beneath I've indicated a bit of the ongoing process of improvisation in "Mo' mama". You can go on indefinitely indicating characteristics this way (see also the YCDTOSA II section with bars from the "Pygmy twylyte" solo).

- A: Opening lick.
- B: Variation upon the opening lick (rhythmically and melodically).
- C: Addition of a quarter-tone, guitar effects and altered notes to make it extra spicy.
- D and E: New motifs are introduced that get varied upon.

The "Chicago '78" release by the ZFT contains a live version of "Yo' mama (Chicago)", recorded a few months after the "Sheik Yerbouti" version, this time without the overdubs. It follows the same set-up as above. The guitar solo in it makes this version specifically worthwhile. I've included two examples in the following Halloween section of this study.



Mo' mama, opening, notes with encirclements. Source: The Frank Zappa Guitar book (transcr. Steve Vai).



HAMMERSMITH ODEON

In February and March 1978 Zappa played a couple of shows at The Hammersmith Odeon in London. This stage became his main source for live recordings from 1978 through 1980. Most of the live tracks from "Sheik Yerbouti" stem from The Hammersmith Odeon. Other than the N.Y. Palladium this hall still exists, today as the Hammersmith Apollo. With the 2010 3-CD "Hammersmith Odeon" release by the ZFT

we get a chance to hear a lot of these songs without the studio overdubs (abbreviated to H.O. below). Above examples from "I have been in you" and "Flakes" already came by.

Dong work for Yuda (1978)





Dong work for Yuda, end. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

"Dong work for Yuda" is blues in D (major/Mixolydian). The transcription below is from the end, containing various speech influenced bars. In bars 3-4, 7-8 and 11-12 the melody becomes chromatic, though the lyrics still follow the 4/4 meter. In bar 15 it's the other way round: the rhythm and the 23/16 meter are entirely dictated by the rhythm of the spoken words. The melody remains in D at this point.

The blues scheme at this point:

- Bars 1-2: step I from the blues scheme, following D major.
- Bars 3-4: step I chromatically.
- Bars 5-6: step IV from the blues scheme, switching to D Mixolydian.
- Bars 7-8: step IV chromatically.
- Bars 9-10: return to step I from the blues scheme, continuing in D Mixolydian.
- Bars 11-12: step I chromatically.
- Bar 13: step V following D major.
- Bar 14: step IV.
- Bars 15-23: outro, eventually landing on I.

Compared to the "Joe's garage" version of this song, this rendition has more drive to it. It goes faster, has specific bass licks and a keyboard playing the chords via eighth notes. John Smothers, who was Zappa's bodyguard for years, delivered the lyrics. There's little about him to be found in the Zappa biographies. He did make an appearance in the "Baby snakes" movie. He gave Zappa the textual material for the homo sex in prisons part of "Joe's garage". "Keep it greasy" and "Outside now" by themselves have nothing to do with it (apart from the word "plooking" in "Outside now"), but were now placed in this context.

Watermelon in Easter hay (prequel)

The peaceful opening of "I have been in you" gets a sequel in "Watermelon in Easter hay (prequel)", where Zappa shows himself as a romantic all through. The word prequel sounds quite correct, because it's a shorter version of this solo. Here the vamp is played about three times as fast as on its first release by Zappa himself on "Joe's garage" (see "Watermelon in Easter hay", two sections ahead). The metronome tempos of a quarter note in the transcriptions are approximately:

- Odeon Hammersmith: 85.
- Joe's garage: 60.

Since I've notated the Hammersmith Odeon version via eighth notes and the one on Joe's garage via quarter notes the comparison becomes 170:60 if I had chosen quarter notes for both.

The other version released by the ZFT on "FZ plays the music by FZ" is roughly dated as January or February 1978, thus from the same two months as the Hammersmith Odeon concerts. That one is a slow version, so it looks as if Zappa tried out two tempos during the same period. The phrasing of the main theme in all four versions of the solo, that today are available, is different. Dweezil states that "it's amazing how the slightest change in phrasing effects your emotional response. When Frank played the "Joe's garage" version suddenly there was no other way for that melody to be played". Indeed the "Joe's garage" version has the main theme played in its most compelling form. As it comes to the soloing, that follows upon it, the Hammersmith Odeon version can be called a little jewel, that can compete with the "Joe's garage" version. Instead of seeking rhythmic variety as he usually does, Zappa here basically follows the rhythm of the vamp, letting the emotions of the harmonies prevail. More on "Watermelon in Easter hay" follows in the Joe's garage section.

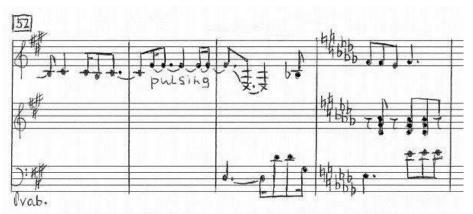


Watermelon in Easter hay (H.O.), section. Transcription: KS (update 2011, deposited at the I-depot, The Hague).

King Kong (1978)







King Kong (O.H.), section. Transcription: KS (King Kong lead melody taken over from the Uncle Meat booklet). Update 2011, deposited at the I-depot, The Hague.

After Zappa had given "King Kong" its definitive form at the end of the "Uncle Meat" album, the main theme hardly changed no more. The live version on "Hammersmith Odeon" starts identical to "Uncle Meat", except for that the bass plays along the I and IV chords of the Eb Dorian scale and that the keyboard makes a chord progression. First a standard chord progression of 5th chords, next some enlarged chords.

In the "Uncle Meat" booklet Zappa prescribes Eb pedal for the bass and just the Absus4 chord, the chord that appears in bars 15-16 and bars 21-22 in the transcription. The descant in bars 15-22 is played via parallel thirds. The soloing that follows upon the theme is played over two alternating bass notes, Eb and D, each being played for eight bars in a fast 6/8 meter. The change of scales, that in this case comes along with it, is exceptional in Zappa's output. If he did change keys, then they would be closely related. Here however you have the unrelated Eb Dorian and D Lydian scale. The guitar solos on disc III are strong ones. The two from above are followed by another successful "Black napkins" version.

In 2017 the frontman of the metal band Ghost, hitherto only appearing on stage masked, revealed himself as Tobias Forge. In an interview with Pablo Cabenda, he mentioned the five albums that inspired him most, confirming the status "Sheik Yerbouti" has in Zappa's oeuvre. This album became number two in his list, behind Metallica's "Master of puppets", commenting: "The Frank Zappa entrance model. If you like this one, you can dig deeper into his huge repertoire. On this one he combined a heavy dose of humor with catchy songs. Sometimes weird, sometimes very eclectic, but always very musical. I'm a fan of his well-crafted popsongs, like "Bobby Brown", with a head and a tail. Those famous lengthy guitar solos of his are a different matter. They can be so excessive and introverted that it looks like he's masturbating over a song."

Zappa is normally seen as a popstar and getting judged upon as such. The amount of guitar solos and their length are by pop standards indeed excessive. By jazz standards it's not abnormal. The quantity of for instance piano solos by Keith Jarrett or guitar solos by Pat Metheney is bigger. In this study I'm spreading out examples evenly over Zappa's output, leading to 110 excerpts from guitar solos. That has become excessive for a study, when you come to think of it. (Physically Zappa's appearance as a guitar player on the "Guitar" CD photos express a desire for nicotine rather than introverted sex. But when you're looking at Pat Metheney's face when soloing, what's the matter with that guy?).

When you like something, I'm an adherent of Liberace's line "too much of a good thing is wonderful". Of all composers I appreciate Bach, Beethoven and Zappa the most. Not only because of the high level they reach, also because there's so much to pick from. Too much to really know all of it. I have to admit that the exact opposite can also work. Da Vinci's Mona Lisa has become so famous not only because it's a masterpiece but also because he painted only one portrait in that manner.

ONE SHOT DEAL - CHICAGO '78 - HALLOWEEN: LIVE COMPILATIONS #1 AND XENOCHRONY

ONE SHOT DEAL

During the European winter tour of 1978 Zappa recorded most of the live tracks for "Sheik Yerbouti" during the five concerts he held at the Odeon Hammersmith in London. Touring continued on the continent. At least two concerts in Germany got filmed for TV, so you might here have a possibility for a DVD, for instance combined with the bands appearance at the Saturday Night Live show (see also the Live recordings section of the left menu). To the right: FZ and Arthur Barrow during the Ulm open air concert, summer 1978 (German TV registration).

Heidelberg

More teasing is what Zappa says about the "Heidelberg" solo, namely that it's not the best of its kind, but that he liked this one because of the crowd noises responding to the solo. Another pro of this solo is the interaction with the keyboard player. "Heidelberg" premiered on the 1987 promotional cassette "The guitar world according to Frank Zappa" and got included in the "One shot deal" CD by the ZFT. It's a smaller cross through selection from the live archive, one of the by now twenty releases by the ZFT that are made up of live recordings. The ZFT succeeds rather well in filling up gaps that were left by Zappa himself. The kind of solo Zappa is referring to is a solo in E Mixolydian, starting over a sustained E pedal note without drumming. The "Mo' mama" and "Yo' mama" solos from the previous section are two other examples. "Why Johnny can't read" from February 1979 is a fourth example, recorded several months later, so there could very well exist a whole series of solos of this type in the archives. Other than "Why Johnny can't read", "Heidelberg" resembles "Yo' mama" in some of its phrases. Its set up is different however in the sense that it doesn't evolve into a chord alternation, but into strict 4/4 over a bass playing just the E on beat. First Zappa sets the meter to 4/4 himself with his guitar rhythm. Next the drummer joins in, followed by the bass. The section below from 2:13 to 3:04 includes this transition from playing without meter to everybody playing in 4/4. The solo at the end returns to the sustained E pedal note without drumming. Zappa himself started listening systematically to the tapes for guitar solos from 1979 onwards for the three guitar collections on CD. It's a tempting thought what could have been done if he would have had the time going back in time picking out the best solos by himself, or maybe by Steve Vai or Dweezil Zappa.

Hiring studios for finishing the album had become expensive and studios had to be booked months in advance. So Zappa decided that it was more economical to build a studio of his own at his house in L.A. It was completed during the fall of 1978, when he had set up his own record company Zappa Records (later Barking Pumpkin Records). He also had made a deal with the Indian born violist "L." (Lakshmirnarayna) Shankar. He produced Shankar's album "Touch me there" for his new company and co-wrote four songs with him for the album (see the next section for more about this record). Shankar made a guest appearance during the concerts around Halloween of October 1978 (See the "You can't..." section for "Thirteen"). By that time the two lead singers next to Zappa on "Sheik Yerbouti", Terry Bozzio and Adrian Belew, had left the band. Terry had now worked with Zappa for four years and needed a change, his name forever being associated with beating "The black page". Adrian accepted an offer by David Bowie, but later considered changing this fast a juvenile mistake. Zappa normally accepted band members leaving without ill feelings and didn't try to convince them to stay. Terry was replaced by Vince Colaiuta and Adrian by Denny Walley.

The Zappa Family Trust compiled an audio DVD from the concerts as "Halloween 1978", released in 2005. The touring program by now included various unreleased material under development that would appear on record over the period 1979-1982.





Heidelberg, section. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

XENOCHRONY

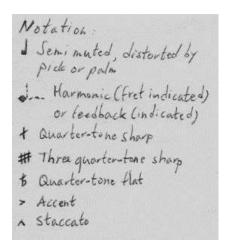
Via interviews with Zappa it has been known for long that the solos for "Joe's garage" (1979, next section) were recorded live. He separated the guitar parts from the tracks and added new accompaniments to them via a method that he called xenochrony. The term stands for combining two tracks, that were recorded separately, in such a manner that they respond to each other. The earliest example on record, "Friendly little finger", has already been dealt with in the "Zoot allures" section. In order to achieve this you need a velocity control regulator (VCR), a device that can change the tempo without affecting the pitch. This way you can manage that both tracks can be both on beat at several instances, so that it looks as if they were recorded at the same time. In fact, if Zappa hadn't informed us about when he applied xenochrony, we would never know. "Ya Hozna" from 1984 is an exception, because on this occasion, you can deduce it yourself that this must have happened. See the Them or us section for the details.

Occam's razor - On the bus

With the ZFT release "One shot deal" however, we get to hear the original "Occam's razor" solo, parts of which became "On the bus" from "Joe's garage" via xenochrony. I never understood why Zappa chose for this labour intensive method on "Joe's garage". He adapted the sound of the guitar to be in line with the sound of the other tracks from this album, so probably that would have been possible with the live accompaniment as well. Secondly, if he wanted a different accompaniment nevertheless, then why not overdub it (you could have someone conducting listening to the old accompaniment on a headphone and let the band do a new accompaniment, exactly in pace). Comparing "Occam's razor" with "On the bus" gives an inside the kitchen opportunity to look at the process. It explains in my opinion why Zappa chose for xenochrony: it is not so much he wanted to manipulate the accompaniment, he wanted to be able to manipulate the solo itself completely at will as shown below via two corresponding sections. "On the bus" starts with the guitar line from the "Occam's razor" solo at 0:17 on the "One shot deal" CD.



Occam's razor, 0:17 till 0:55. Transcription: KS (update 2008, deposited at the I-depot, The Hague).





On the bus, 0:00 till 0:33. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

For the next section I'm taking "Occam's razor" as the basis and I'll comment upon the main differences that can be found in "On the bus".

- Most obvious to notice is the different accompaniment. "Occam's razor" belongs to the series of C Lydian solos Zappa played during the 1979 tour of which four of them landed on "Shut up 'n play yer guitar" (see the corresponding section). Here you actually get to hear the transition to one of the written themes of "Inca roads". "On the bus" has a one-bar vamp-like bass pattern with A as a pedal note, so this one is in A Dorian.

- The tempo of the accompaniment from "On the bus" is slightly slower. Just for that you'd need some speed adaptation for the solo.
- During bars 1-5 there are minor tempo differences. The figure starting with G in bar 2 starts about a 16th note later and ends earlier with the high F# in bar 3, so here Zappa accelerated "On the bus" a little. By the way, transcriptions like this or in the Guitar book aren't done with a mathematical precision that you could get by measuring the pitch lengths physically. They are good approximations of what a human ear can distinguish. There's no point in notating rhythms with more precision than you can hear.
- At beat 1 of bar 6 you get at a more serious tempo difference. "On the bus" gets almost an 8th note ahead.
- At the end of bar 6 you can see that Zappa started editing the "Occam's razor" solo. The whole block A is missing and it's not exactly one bar's length. So this is the sort of manipulating the solo at will.
- At bar 8, starting with the chord, "On the bus" is on beat, just as "Occam's razor", that is now one bar behind. So here Zappa used xenochrony to get "On the bus" parallel again.
- In bar 11 the whole block B gets skipped. Next the solos are about parallel for a bar and a half.
- In bar 13 block C is removed. "On the bus" is now up to three bars ahead. Both solos return to the opening lick, now with the A sustained for some bars.

Remains the question why Zappa picked those three blocks from "Occam's razor" to skip from "On the bus". "Occam's razor" has movements with rapid sequences, sustained notes and movements in between. The three blocks are in between. I think Zappa wanted "On the bus" to be a more articulated solo regarding changes, whereas "Occam's razor" is more relaxed. It must also have been that he enjoyed this type of work, sitting for hours in a studio editing tapes. On "Friendly little finger" and "Rubber shirt" you could call xenochrony an experiment exploring the possibilities of this technique. On "Joe's garage" it's done extensively and systematically. Any "normal" producer would have settled for "Joe's garage" as a double album instead of a three-record set.

CHICAGO '78

One instance of where the ZFT jumped in effectively in filling in gaps are the "Chicago '78" CD and the "Halloween" audio DVD. Zappa himself used relatively little from his 1978 fall tour for his albums. As more often with live concerts, version differences and guitar solos are making "Chicago '78" an interesting album. "Twenty-one" is a guitar solo, played as the concert opener. "Village of the sun" features Ike Willis on vocals. This version includes a guitar solo. "Yo' mama" can be heard without the studio overdubs. At some points it's more sober regarding the keyboard and vocals parts, but this doesn't affect the strength of the guitar solo. The general outlines, as sketched in the Sheik Yerbouti section, are followed again, but the solo functions very well as a composition upon its own merits. "Little house I used to live in" gives the band members room to improvise.

Paroxysmal splendor

During "Paroxysmal splendor" you can hear unreleased components, while material from other songs can be recognized as well. It's made up of the following blocks:

- 0:00 Opening bars from "Greggery Peccary". See the Orchestral favorites section for the score.
- 0:27 "FZ & pig". Ballroom music. You can hear the crowd cheering, so there must actually be some dancing taking place. Maybe a coincidence, but it fits in well with the classical decorum of the Uptown Theater from Chicago, a city known for its combination of classical and modern architecture (photos below). It's stereotype music, but I know too little of dances to comment upon the style. It's in C and in 4/4. It's begins with a repeated cadence like G-B-C movement, coming at rest upon C. The example below begins with the second theme from this dance, starting at 1:05. It's played only once. It's following a chord

progression with a frequent use of altered notes. The basic pattern is F-Fm-C-Em-C-GM7-G, used with a lot of liberty, enlarging the chords by adding in extra notes. At 1:24 the opening movement recommences.





Paroxysmal splendor, 1:05 till 1:30. Transcription: KS (update Winter 2017, deposited at the I-depot, The Hague).

- 2:00 Guitar solo, using one of the riffs from the later "I'm a beautiful guy" song as a vamp.
- 3:34 Variation upon "Ship ahoy" (see the Läther section for an example from "Ship ahoy" as how it landed on "Läther").
- 4:26 "Ten years later". Straightforward rock music and soloing in A Dorian/Mixolydian. This section is included to show that Zappa could do anything. As he had looked for deliberate simplicity in doo-wop on "Cruising with Ruben and the Jets", you can also encounter bars in other styles, played in a basic stereotype manner. Bars 1-3 contain the A chord pulsing in a 24/16 meter, interrupted only once by a D chord at the end of a bar. These are bars of eighth ticks, split into three. The standard rock meter is 4/4, so one might also choose to notate this in 4/4 with four beats made up of two triplets each. The ensuing soloing fluctuates between Dorian and Mixolydian by using both C natural and C sharp, a recurrent practice in Zappa's music.



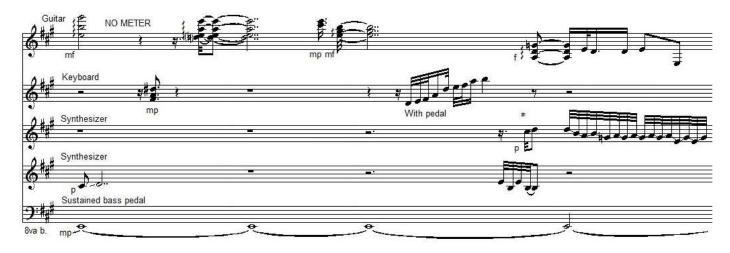
Paroxysmal splendor, 4:39 till 4:51. Transcription: KS (update Winter 2017, deposited at the I-depot, The Hague).

- 5:30 This soloing moves over into an early live performance of "Crew slut". This song would first be released in a studio version on "Joe's garage". Here it's a raw basic version without the characteristic accompanying figure from "Joe's garage".
- 6:02 The soloing in A Dorian/Mixolydian continues as an outro.

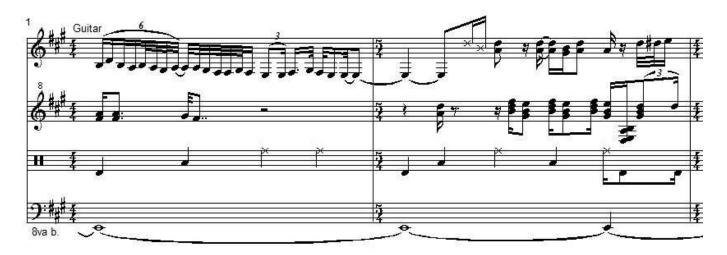
- 7:07 Zappa ending with saying "now that was just make belief, we were just pretending".
- 7:13 End.

Yo' mama (Chicago '78)

The Chicago '78 version of "Yo' mama" let's you hear how this song sounded live without the overdubs. It uses the same structure as the Sheik Yerbouti version of the piece (see "Yo' mama (London)" from the corresponding section from this study). Regarding the sung part there are no significant differences. The solo, on the other hand, is strong. Specifically the part over the sustained bass pedal sounds entirely new.



Yo' mama (Chicago '78), 2:33-2:51. Transcription: KS (update Fall 2019, deposited at the I-depot, The Hague).





Yo' mama (Chicago '78), 4:39-4:59. Transcription: KS (update Fall 2019, deposited at the I-depot, The Hague).

Drumset notation (bottom up): bass drum, toms 1 and 2, snare drum, cymbals/ticks.

The first example from above is from the opening block of this solo, when there's no drum part. Zappa is playing without a meter. It contains a chord progression: E-Dsus2-E, followed by a quartal chord (A-D-G, two stacked fourths). This last chord gets accentuated and returns a couple of times. It's an altered chord, using a G natural, which makes it sound so sharp in the Mixolydian context of this solo. One might also interpret this as another example of mingling of Mixolydian and Dorian. The keyboard harmonies during the second E chord extend the harmonies to E11. This also goes for much of the second example, where the drummer has entered the picture. I've included the drum part on this occasion, otherwise the meter notation with 4/4 and one time 5/4 couldn't be followed. Zappa himself may be playing chords of two notes, but the E pedal and keyboard part make the overall harmony sound much wider.

HALLOWEEN, 1978

Three titles from the Halloween concert appeared on YCDTOSA Vol. IV and VI (see the YCDTOSA section #1 for "Thirteen"). For this DVD the Zappa Family Trust chose the part of the program that was basically the same as the year before plus two individual solos: the concert opener "Ancient armaments"

with Zappa on guitar and "Zeets" featuring Vince Colaiuta. Instead of doing an early and a late show on Halloween night, this year he chose for an exceptionally long concert of four hours. He introduces this now legendary concert as "All right this is the big one, [...]. Since this is the big one, we're gonna do an extra long show. I hope you don't have to leave early".

Ancient armaments

The ZFT DVD represents 70 minutes taken from this gig. The concert opener was a guitar solo in A Dorian in 3/4, called "Ancient armaments". It's an example of Zappa playing a solo independently, instead of forming part of a song. The concert ended with another big solo, played separately, namely a mix of "Black napkins" and "The deathless horsie" with Shankar on violin. The other two solos on "Halloween" are played during "Easy meat" and "Stinkfoot".



Ancient armaments, opening. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

"Ancient armaments" has been released before as the b-side of the 1980 "I don't wanna get drafted" single. The crowd is much enthusiastic and Zappa waits for about three minutes to let things settle down and accelerate his soloing. The accompaniment first plays solo for a couple of bars, next Zappa joins in with some sustained notes.

Stinkfoot (1974-78)

"Stinkfoot" exists in two variants. One is the original studio recording for "Apostrophe (')", the other is a live variant, today available in four versions. The live variant follows the thematic architecture of the studio version, but has a much different main vamp. Both bass lines of the vamp are in 12/8 and follow the C Mixolydian scale. As for their notes and chords, they have about nothing in common. The live version has a C and B chord alternating. For the studio variant you have various people playing freely through the C Dorian scale (that has an Eb compared to the E natural of the bass). All versions contain a solo, making each one of them worthwhile. There can be stage happenings as well. The 1988 track has an intro about Jimmy Swaggart being caught with a prostitute. During the 1978 performance Zappa recognizes an old

acquaintance in the audience from the Garrick theatre concerts a decade before, a guy who then came on stage every night.



Stinkfoot (1978 live version), opening bars. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

The Andy Aledort transcription in the Apostrophe (') songbook of the example on the next page offers a more practicable solution for a band covering the 1974 version of "Stinkfoot". The second example above is a rather literal rendition of the specific Apostrophe (') execution, that I needed to visualize the differences between the 1974 en 1978 versions. See the Apostrophe section of this study for more about "Stinkfoot", with a couple of bars from the 1974 "Stinkfoot solo."



Stinkfoot (Apostrophe (') studio version), opening bars. Transcription: Andy Aledort (2002, basis)/KS (2008, details).

JOE'S GARAGE: THE EMOTIONAL DIMENSION

The unlimited popularity of the tonal system in western music has a lot to do with its capacity, combined with instrumentation and the way music is performed, to translate emotions into music in a for everybody recognizable form. It's also the way most people like to talk about music, often giving highly subjective interpretations of what the music means in their opinion along with it. Sections of music can express feelings of joy, sadness, anger and relaxation. Why this effect exists is usually not very clear. Dissonants and shouting can be associated with anger or tension, but why some melodic lines have the effect of joy and others don't is hardly explainable. It's better to take it for granted that the three downwards played notes of a minor third have the effect of sadness, and composers looking to maximize recognizable emotional impact probably have a good catalogue in their mind of melody types and their effect (compare "Debra Kadabra" from "Bongo Fury" from 2:44 onwards for a minor third effect).

Music can also be on a more emotionally abstract level, but certainly not less emotional, where it becomes difficult to translate the emotions into words other than "expressive" or "intense" and where the emotions seem to rely more on the pleasure of the listening to the music itself. Zappa prefers the more abstract level, confirmed by his unwillingness to take his personal life as the subject of his lyrics. He may talk about his lovely wife and children in "The Real Frank Zappa book", but never on his albums. Zappa's music can be very expressive, but speaking for myself I have no idea how I could describe for instance the guitar solos on "Shut up 'n play yer guitar" in emotional terms as happiness or tension.

In Zappa's music the whole palette of emotions occurs in such a manner that it gets indefinable in easy terms. This is related to his attitude towards music, being that he can use any chord in any scale as well as atonal music. He can, but does not specifically look for progressions that express drama in a classical sense. I'm continuing with this subject with my comment upon the "San Antonio" guitar solo from "Guitar" (1988). The more abstract level of musical expression is possibly indicated as a piece of poetry by Zappa himself in "Packard goose":

"Information is not knowledge

Knowledge is not wisdom

Wisdom is not truth

Truth is not beauty

Beauty is not love

Love is not music

Music is THE BEST"

Specifically this last sentence has become well-known, because Zappa frequently used it as a slogan ever since the release of "Joe's garage" (next to "Don't forget to register to vote."). As I'm interpreting this, it means that one can listen to music entirely as a goal by itself. Above to the right FZ and Ray White singing "Joe's garage" (Paris 1980 show as broadcasted by Antenne 2).

Related to this is his instrumentation, that is functional for the composition, meant to make the notes audible in a clear way and not to create ornamental atmospheres or to overwhelm the listeners through sound building. Some exceptions do exist like the ornamental harp and percussion part at the end of the "Zoot Allures" guitar solo, that have a relaxing effect. There are also compositions that are specifically about sound effects, like "N-lite" from "Civilization Phaze III". In general Zappa chooses instruments that are unrelated in their sound so that they can play separately as well as together in different combinations, and always remain clearly distinguishable. Alternation of sound is the issue rather than the creation of an overall sound. Furthermore he doesn't raise or bend his voice while singing and he doesn't dance on stage, which is for pop music standards unusual. Zappa during the Larry King Live interview on this topic (CNN, 1989):

- LK: "How would you describe to someone, who had never heard it, the Zappa sound?"
- FZ: "Well, I do a lot of different kinds of music, and uh, you know, ranging from orchestral music to big band music to fuzz tone music, so...".
- LK: "There's no Zappa sound then?".

- FZ: "There are many Zappa sounds and you could specialize in one if you want to listen to only guitar type stuff, then I can give you a list of albums that have that. If you like orchestral music, that's another list, so it's a variety."

JOE'S GARAGE

As far as I'm concerned most note examples presented in this site are of the emotionally abstract kind. With the ones in this section and the previous Ruben and the Jets section, we're getting at songs with a better translatable emotional dimension. Most of them can be found on "Freak out", "Cruising with Ruben and the Jets" and "Joe's garage". Of the infinite range from deepest inner sorrow to sound related expressions as feeling the groove, some basics are passing by in some of the examples from below.

Act I

1.1 Central scrutinizer

During the opening song, the Central scrutinizer character introduces the play. Speaking through a megaphone, he's trying to convince people why rock music should be made illegal. This piece gets accompanied by a lengthy vamp, lasting eight bars. Halfway the song, this vamps steps into the foreground, being played as an instrumental interlude (1:04 through 1:21).





Central scrutinizer, vamp. Transcription: KS (update fall 2017, deposited at the I-depot, The Hague).

It's another example of Zappa using closely related scales next to each other. Bar 1 follows D Mixolydian, bar 2 is in D Dorian. Bar 5 is step IV of D Dorian. Bar 7 transposes the marimba part up with a major second. This causes a key change to A Mixolydian. The harmonies are a series of thirds and triads. The synthesizer and duck quack sounds are only there as irregular embellishment. Towards the end the vamp is drawn back. Here Zappa is deliberately creating a chaotic atmosphere, letting the scrutinizer stumble over its words with a line taken out of its context. The white zone refers to the area in airport parking spaces, meant for loading and unloading only. It has nothing to do with the plot of "Joe's garage".

1.2 Joe's garage

Relaxation and the building up of tension are present in the title track of "Joe's garage". It opens with a slow I-IV intro in E and then, as the sung melody begins, proceeds with I-IV-V. This movement continues in several shapes, alternated with divers interrupting bars, all in a slow tempo. The ease of the I-IV-V progression expresses Joe's fine memories of the good old times when he was playing a tune like this with friends in his garage. At the end of the song, when Joe is complaining about all the new fashions in rock music, the comfortable I-IV-V environment is left and the tension starts to rise, ending with police interference.



Previous page: Joe's garage, opening and several sections pasted together. Transcription: KS (2nd printed edition, 2001).

Note: the actual pitch of the singing is an octave lower than I first notated here.

In the transcription above I've combined the opening and some sections, the last bar containing the start of tension. In the last two bars beats 1 and 2 of the first one still contain the I chord from E; on beat 3 this chord gets enlarged to I 9th. In the following bar the D# and G# are altered to natural and the whole harmony becomes an 11th chord over A.

1.3 Catholic girls

The outlines of "Catholic girls" go as:

- 0:00 Instrumental intro.
- 0:11 Theme 1. A melody of two bars in F#. The accompanying chord progression is I-IV-I-VI, like "Joe's garage" at this point quite conventional. See bars 4-6 from the example below. This theme gets repeated three times, before it ends with a final bar with B-E-C# as chord progression.
- 0:28 Theme 1 four times again, now ending with A-B as chord progression.
- 0:44 Theme 2, a sequence following a modulation scheme: C# Dorian, Gb Lydian, Db Dorian, Ab Mixolydian, E Dorian, A major/Mixolydian. So here all conventionalism is gone.
- 1:11 Theme 3, another sequence over a chromatically descending bass line.
- 1:22 Theme 1.





Catholic girls, 2:01-2:14. Transcription: KS (update fall 2017, deposited at the I-depot, The Hague).

- 1:38 Interlude. This part is an instrumental variation upon theme 1 with odd rhythms. The transcription above contains the end of this section with:
- a) Bar 1 in 18/16 with a repeated figure, lasting 9/16. The two altered notes, E and A natural, that you could hear earlier at the end of theme 1, turn up more explicitly here. It makes this part more volatile as it comes to what scale it is using. Instead of I-IV in F# major, you're now hearing I-III in F# Mixolydian with an E natural. The whole interlude gets characterized by an ongoing stream of notes using D#m7 and Bsus2 as broken chords.
- b) Bar 2 in 14/16 with a repeated figure, lasting 7/16. The chords are the same as bar 2 from theme 1.
- c) Bar 3 in 22/16 with a repeated figure, lasting 11/16. This figure follows the A-B progression as played at the end of the first repetition of theme 1. By itself you could call it A Lydian.
- d) Bars 4-6 with theme 1.
- 2:09 Themes 1-3 again.
- 3:01 Theme 1 some more, with minor variations.
- 3:17 Theme 1 keeps being repeated to the end as a coda, with improvisations and additions.
- 3:54 With the coda almost faded out, the Central scrutinizer turns up, closing the song.
- 4:18 End.

1.4 Crew slut

The Central scrutinizer continues talking, introducing the next song, "Crew slut". This song follows the verse-chorus structure and includes solos by Denny Walley on guitar and Craig Stewart on harmonica. The verse has a characteristic vamp (F-E-D, A-C-A), played over a D by the bass as pedal note. This vamp continues during the solo. The basis is thus D Dorian, but it gets mingled with D Mixolydian by the soloists, who are playing the Mixolydian F# just as well. A crude earlier version of this song can be found on the ZFT release "Chicago '78". There it's a part of a piece called "Paroxysmal splendor".

1.5 Fembot in a wet T-shirt





Fembot in a wet T-shirt. Transcription: KS (update 2005, 3rd printed edition 2007).

The opposition of tension and relaxation is more directly present in the "Run home cues #3" example from the Movie scores section and the chamber music section at the end of "Lumpy Gravy, part I". After the dissonant notes in this section a little dialogue follows with one saying "not okay" and the other one complaining in response "no, man, no, I can go through this again?". After this some charming consonants follow. Happiness has already come by. Controlled in "Jelly roll gum drop" and "Deseri" from "Cruising with Ruben and the Jets". Euphorically in "What will this evening bring me this morning" from "200 Motels". The example above is from "Joe's garage".

The harmonic basis in bars 1-4 is a I-IV alternation in E. Staff 1 in bar 1 adds in extra passing through chords: the II chord over I and the V chord over IV. These passing through chords are responsible for making the opening sound so cheerful. Bar 5-6 have something of the VII-I cadence of E Mixolydian.

1.6 On the bus

Via interviews it is known that the guitar solos from "Joe's garage" were recorded live. They sound as if they stem from the same recording sessions as the other songs, because Zappa recorded the accompaniment anew in the studio. The method he applied for creating the illusion that everything got played simultaneously, he himself called xenochrony. How this technique worked, and why he used it so intensively, can be followed in detail by comparing "On the bus" to "Occam's razor", the original solo. Two sections are present in the previous One shot deal from this study.

1.7 Why does it hurt when I pee?

The outlines of "Why does it hurt when I pee?" are sketched on page 227 of the Ludwig study (see the references). It's a compact rock song with an interesting instrumental interlude. The song has a basis in A minor/Dorian with both F natural en F sharp being used (part a, "Teil a", of the outlines).

Form: 1. Strophe: a-a-b-c

2. Strophe: a - a - b' - c

instrumentales Zwischenspiel

3. Strophe: a - a - b' - c'

Schluß

Harmonik: Grundakkorde:

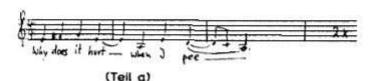
1.+2. Strophe: a - G - F - F - G (Teil a)

E-F-G-E (Teil b)

a - D (Teil c)

3. Strophe: a - h - C - (a) - D - C (Teil c')

Melodik:





Why does it hurt when I pee? Part of the song's outlines by W. Ludwig. Notes:

- The German chord h stands for a b (Bm) chord, otherwise musical terms are pretty international. Or you can put them through translating devices as Google translate.
- The third note in bar 1 should be an E too. The sequence E-F#-G does turn up like this as a little variation upon this motif at the end at 2:00.

Bars 1-8 of the interlude are in A minor, playing around the I and VI 7th chords. Next you're getting at a series of major triads, interrupted once by a minor triad: E, F, G, E, Am and ending with D, sustained for various bars. They are the same chords as indicated by Ludwig for parts ("Teilen") b and c. Such a series can't be attributed to one specific scale. Keys are implied per chord, like A minor returning in bar 13. The D pedal part (bars 14-18) can be called D Mixolydian. This parallel playing of chord types is also addressed at in the Freak out and YCDTOSA II sections of this study. Bars 9-11 form a little sequence, with a figure being transposed upwards. First with a minor second, next with a major second.





Why does it hurt when I pee?, interlude. Transcription: KS (Summer 2019, deposited at the I-depot, The Hague).

1.8-9 Lucille has messed my mind up - Scrutinizer postlude

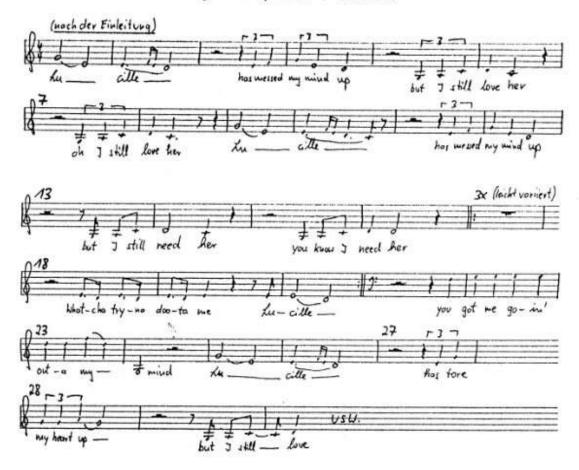
"Lucille has messed my mind up" is one of many examples of Zappa doing something one time only. In this case a sentimental ballad, a slow love song following easy patterns. It's yet another example of him doing exactly what he himself claimed to dislike. See the Real FZ book, chapter IV, section "purely a mistake", about his dislike of love songs. Stating for instance: "When they start lingering about love as a romantic concept - especially in the lyrics of the sensitive singer/songwriter type - we're even one step closer to total mental decay". This is a recurrent factor in his output, that can be confusing. This particular song is also an example of reggae. Some of its elements are related to "Sy Borg" (see below), but that latter song is harmonically far more complex.





Lucille has messed my mind up, opening. Transcription: KS (update 2005, 3rd printed edition 2007).

2 ee) Lucille Has Messed My Mind Up (JOE'S GARAGE)



Lucille has messed my mind up, lead melodies. Transcription Wolfgang Ludwig.

"Lucille has messed my mind up" is in A minor. The instrumental opening, bars 1-7, is using a subset of six notes from this scale. It's made up of A-B-C-D-E-G, thus avoiding the F. You have to wait till bar 9 to know that the song is in minor for certain. The song displays a simultaneous use of 4/4 and 12/8, a very mild form of polyrhythms. Four beats can get subdivided into two or three ticks. The basis is the reggae rhythm by the bass and the two rhythms guitars. They are consistently playing in 12/8, so I've notated this song in 12/8. W. Ludwig, page 273, transcribed the lead melody of the two themes, that I've added to the example to show the polyrhythms more explicitly. These sung themes are in 4/4, so it's logical that he chose 4/4 for his transcription. The keyboard players and the drummer alternate between 4/4 and 12/8. Since 4/4 is the standard in pop-music, you've also got some authors who prefer to avoid notating in 12/8. Then you get triplets all the time or - when applicable - a note that two eighth notes should actually be played as a triplet (a fourth and an eighth note). These are all valid notational variants, but what's more simple than noting that four times three is twelve. The reggae rhythm, that Zappa is using here, is standard. There's a weak downbeat and a stronger accent on the third beat. The rhythms guitars are playing two ticks on beats two and four. The outlines of the song go as:

- 0:00: Bars 1-7 contain the instrumental opening bars, introducing the reggae rhythm. The keyboard

players are improvising during the intro.

- 0:15: Main theme. Bars 8-13 feature most of theme 1. It's sung over a chord progression. C mingled with Am (or Am7), Dm mingled with F (or Dm7), G and Am. So it comes to rest upon the tonic at the end, rather than at the beginning.
- 0:49: Second theme, phrase 1 (bars 18-20 from the Ludwig transcription).
- 1:13: Second theme, phrase 2 (bars 21-24 from this transcription).
- 1:19: Main theme.
- 1:53: Second theme.
- 2:24: Playing around the main theme till the end of this song.
- 5:42: End. On the original vinyl album the "Scrutinizer postlude" was part of this song. They got separated on the CD version. "Scrutinizer postlude" is now an individual track of 1:54 minutes with the Central scrutinizer talking. At the end he introduces the L. Ron Hoover character, head of the Church of Appliantology.

Act II

1.10 Tush-tush - A token of my extreme

"A token of my extreme" is a relaxed song, part of a set of three such songs following closely upon each other. The others are "Lucille has messed my mind up" and "Sy Borg", these last two with a slow reggae rhythm underneath them. With different lyrics you could call these songs ballads. For "Joe's garage acts II & III", Zappa could return to a number of unreleased songs he had in stock as well as guitar solos from the last tour. See the One shot deal section for the "On the bus" solo. "A token of my extreme" draws upon a 1974 concert opener, called "Tush-tush". This predecessor got released itself on the later 1988 "YCDTOSA Vol. II" release. "Tush-tush-tush" is built over a I-VII alternation in F# minor (E-F# when the pick-up bar moves over to bar 1; from bar 1 onwards you've got two bars with F#, followed by two bars with E). A bit later on, starting at 1:38, you can also hear a II-I progression being used at the pick-up point, G#m-5 - F#m). Both Napoleon Murphy Brock and George Duke had the ability to improvise lyrics combining understandable parts with meaningless and strangely pronounced text blocks. It creates an illusion of an interesting story being told and you're blaming yourself for not understanding it to the full. You can listen to it again and the same thing reiterates. George Duke and Napoleon Murphy Brock also do this on "Smell my beard" and "The booger man" from "YCDTOSA Vol. IV", for which songs they get most of the credit. Zappa makes fun of this with his introduction to "Dupree's paradise" on "YCDTOSA Vol. II", another such example ("... confronted with a partial - how shall we say this - language barrier here. We don't want to press the issue too much folks, but the chances that you figuring out what he [George Duke] is going to say during the song are nil."). In the on-line midi file the lyrics aren't included except for the three returning "Tush-tush-tush" notes that George and Napoleon jointly sing.



Tush-tush, opening. Transcription: KS (update 2013; deposited at the I-depot, The Hague).





A token of my extreme, section. Transcription: KS (update 2013; deposited at the I-depot, The Hague).

The three pick-up notes with a VII-I progression in the "Tush-tush" example form the starting point for theme I from "A token of my extreme". Its full melody is presented in bars 1-4. It's also played over an F#-E (I-VII) alternation by the bass, thus the same F# minor key is used again, but the chords in this case are played softly in the background and are mostly used for harmonic fill-in. The melody and the two bass pedal notes stand central. Bar 5, with just the Fmaj7 chord gliding downwards, makes the transition to theme II. The drummer beats syncopically through this bar: four dotted eighth notes, followed by two

normal eighth on beat 4. The remainder of the transcription is this second theme. It's made up of two phrases. The first, bars 6-9, gets played three times with variations. Bars 6-8 are in A minor. In bars 6-7 you have the minor variant with a major 7th (G#). In bar 8 you get the Aeolian variant with a minor 7th (G natural). For bar 9 the music modulates to D Mixolydian. Bars 10-13 are mostly identical, only some melody notes are different because the lyrics have a different amount of syllables. In bars 14-17 you get at a more serious variation. The notes for "cra-zy" are now B-G# instead of an only a G#. Notable is the chord used for the "-zy" syllable, namely Ab. Hence I've notated G# as Ab at this instance. It implies a modulation, but the bass persists in playing A pedal, so a modulation doesn't actually take place. Bars 18-22 form the second closing phrase of theme II. Bars 18-20 continue with D Mixolydian. Bars 19-20 contain improvised keyboard notes along the Dsus4 chord, played lightly. Bars 21-22 are in C# minor (or Dorian, the A/A# that makes the difference isn't used). The keyboard is now playing along Bsus2.

1.11 Stick it out

"Stick it out" is the oldest track from "Joe's garage", going back to 1971. At that point it was part of a sequence, known as the "sofa suite". See the Just another band from L.A. section for a description of this suite. There you can find what the original reason was to partially sing the lyrics in German. When reusing this song for "Joe's garage", Zappa decided to keep this in and integrate it into the plot. The "sofa suite" remained unreleased for quite a while. To the left a sample from the album's cover art by John Williams, featuring collages of all kinds of scientific graphs, drawings and photos. The text has L. Ron Hoover inciting Joe to learn a foreign language in case of "Joe's garage" ... "German for instance?".

1.12 Sy Borg



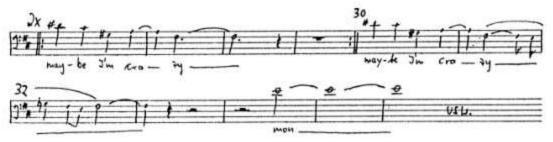


Sy borg, opening. Transcription: KS, with the lead melody taken over from below (update 2018, deposited at the I-depot, The Hague).

If it wasn't for its lyrics, "Sy Borg" could be called a ballad. The lead melody of its main themes can be found in the Ludwig study, pages 273-4, while I've transcribed theme A including the accompaniment. Its structure goes as:

- 0:00 Instrumental intro in F Lydian. Here the same is happening as above at "Lucille has messed my mind up". The rhythm section is following a reggae pattern in a 12/8 meter, while the sung melody goes more like 4/4.





Sy borg, lead melodies. Transcription: W. Ludwig.

- 0:16 Theme A (on-line midi file). Switch to, nominally, E minor, with altered notes turning up frequently. The rhythm guitars and keyboards are playing triads while the bass guitar is often playing notes, that aren't part of these triads. It makes this song harmonically quite complex. It's starting with Em7-C7-Gmaj9 during bars 1-3. Because of this first chord Ludwig probably chose to notate this song as if in E Dorian, but notes are getting altered all the time. The second chord already includes a Bb, played by the bass. Theme A only involves an E natural, so I've notated it as in E minor. The song can also be heavily syncopic. At the transition from bar 1 to 2, the singer and bass are sustaining their notes, but also the drummer doesn't hit anything at all at the downbeat. Everybody floats over the downbeat, as if it doesn't exist, and recommences playing at beat two. Bars 4-5 are a repetition and bar 6 is a cut-off version of bar 3. Bar 7 begins with the C and D chords mingled (in total a 13th chord) and ends with D. At beat two of bar 8 an E is mingled with this D chord. Next a sustained B by the singer gets mingled with F, C and E7, as well as sort of a tremolo (A-B). Thus with F natural and G# turning up as altered notes. Theme A ends with the progression Amaj9 Gmaj9, a parallel playing of chord types.
- 0:40 Theme A gets repeated, a little shortened.
- 1:02 Theme B ("Little wires ..."), bars 16-25 from the Ludwig example.
- 1:22 Theme C ("Maybe I'm crazy ..."), bars 26-36 from this example. This theme sounds as a modulation, the key being A Lydian.
- 1:50 Theme A, played instrumentally.
- 2:14 Themes A-C return with variations and many alternative bars.
- 3:24 Themes A-C as at the beginning.
- 4:52 A keyboard solo, with the song getting more stable in C Lydian.
- 7:04 The ending block is sung and played in a jazz-like semi-improvised manner.
- 8:54 End.

2.1-2 Dong work for Yuda (1979) - Keep it greasy

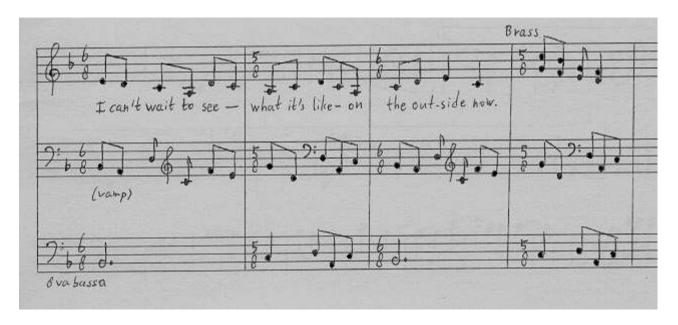
"Dong work for Yuda (1978)" is standard blues. During the 1978 tour Zappa played a somewhat different version live. A section from the latter edition can be found in the Hammersmith Odeon section of this study. The 1979 version is in E (major/Mixolydian). Its general outlines are sketched on page 228 of the Ludwig study, with the lead melodies included below. The 1978 version follows this pattern too, but at a detail level there are many differences. The little instrumental intro and the 23/16 bar from the 1978 version are for instance absent in the 1979 rendition. Instead it has an introduction by the Central scrutinizer and the comments of the John figure are much more extensive.



Dong work for Yuda (1979), lead melodies. Transcription: W. Ludwig.

"Keep it greasy" goes back to 1976. Sections from both the 1976 and 1979 versions are included in the FZ:OZ section of this study. Like the "Catholic girls" interlude, the 1979 rendition of "Keep it greasy" knows an odd meter. This time it's a figure in 19/16, used as a vamp for the guitar solo.

2.3 Outside now



Theme from Outside now, Broadway the hard way version. This example has been in my study since 2000. In 2019 I came across the example below from an article published earlier in 1995.



Outside now example from:

Christopher J. Smith, Broadway the hard way: techniques of allusion in the music of Frank Zappa.

On "Joe's garage" Zappa depicted what can go wrong if you decide to start a career in the rock 'n roll business, with the accent on sexual abuse. It's also an example of the always present two-sidedness in his ideas. On the album sleeve we are warned that people exist who would like to make (rock) music illegal, but the so called central scrutinizer presenting and commenting the little play on the album, gives you some reasons why it should be. Whatever the purpose (if there is any), the play ends with the main character Joe winding up in prison, being able to play his music and guitar solos only in his imagination.

"Outside now" is in Bb Lydian, determined by the bass movement in staff 3. It alternates bars with Bb and C in two different meters (6/8 and 5/8). Otherwise the rhythm is even: a straight string of eight notes. The vamp from staves 2-3 is moving freely through the scale, avoiding any attempt to form a traditional 5th or 7th chord: the first seven notes are all the notes from the scale played once. The interval jumps between the notes keep varying. The sung staff 1 on the other hand does to some extent follow the Am chord. The brass in bar 4 is specific for the 1987 execution. "Outside now" returns in the Perfect stranger section of this study in a version for synclavier, called "Outside now again". See the Guitar section for the opening bars of the guitar solo (as transcribed by Steve Vai).

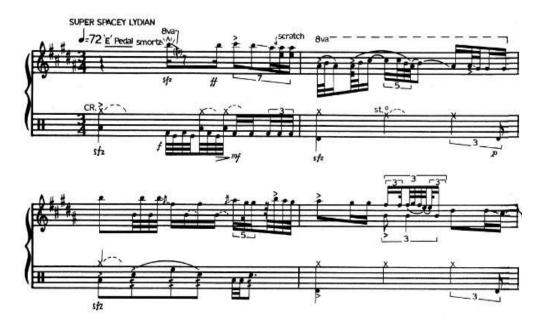
Act III

2.4 He used to cut the grass

"He used to cut the grass" begins with Joe trying to cope with a society where music has become forbidden. Most part of this song is taken up by a guitar solo, sometimes interrupted by Mrs. Borg. There are four solos from "Joe's garage" available in the Frank Zappa Guitar book:

- Outside now, pages 243-249.

- He used to cut the grass, pages 250-267.
- Packard goose, pages 226-242.
- Watermelon in Easter hay, pages 214-225.



Above are the opening bars from the solo, including the drum part by Vinnie Colaiuta. Steve calls it "super spacey Lydian". Two more sample bars from "He used to cut the grass" are included in the quartertones subpage from the Trance-Fusion section. All of the solo from 1:13 through 7:36 can be found in the Guitar book. As you can see in the Guitar book, and hear of course, the song knows a modulation to Mixolydian halfway:

- 0:00 Sung intro in E Lydian.
- 1:13 Start of the guitar solo, continuing in E Lydian.
- 3:31 The Central scrutinizer enters the picture, commenting. Modulation of the solo to F# Mixolydian by a switch of the pedal note.
- 4:35 The Central scrutinizer has faded out. The solo continues in F# Mixolydian.
- 6:36 Mrs. Borg returns with her lines from the first "Joe's garage" track.
- 7:36 End of the solo. The Central scrutinizer rounds off the song, speaking all by himself, introducing the next song.
- 8:35 End.

2.5 Packard goose

In the case of "Packard goose" the direction of the emotions lie mostly in the lyrics. The melody itself is fluid diatonic material, that you could just as well use for a love song. Subtle and effective is a chord change in bars 5-6 compared to bars 7-8, returning in bars 9-10 compared to bars 11-12. It's just the A# going to A natural, but it changes the climate in bars that are otherwise mostly the same. Here it's sung by Joe for fulminating against imaginary reviews of his guitar solos. Touching is also the re-appearance of Mary, just the soft intonation of her voice makes an impression. Her little speech includes Zappa's favorite phrase "Music is the best".



Packard goose, some sections pasted together. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

It's also the non-imaginary Zappa himself, who once referred to rock journalists as people who know nothing about music, who write for people who know nothing about music. His irritation stems from the time "Absolutely free" was released. The album was for a rock album unprecedentedly complex and its details went unnoticed in reviews. There is more to this remark however. He also knew that it would get quoted by these same journalists, who can always comfort themselves with the thought that it's about their colleagues and not about themselves. Rock journalism is a strange business indeed. It's the only type of journalism I know of where it is considered normal to have no technical knowledge about the subject you're writing about whatsoever. Their articles are mostly about the lives of the artist, the music gets only vaguely described by naming styles and mentioning who's influenced by whom. It leads to bizarre individual reviews that don't contain any specific information about the music itself. Only when you're looking for a common denominator and average things out, something more sensible comes out. Another song in which the lyrics are responsible for the impact is an unreleased tribute Zappa wrote for his wife, called "Solitude". It was rehearsed in 1981 and premiered by the Band from Utopia. It's known by fans via a bootleg copy, indeed a touching piece, still waiting for an official release.

2.6 Watermelon in Easter hay

Zappa's two most famous vamps have probably become the two ones from "Joe's Garage", that are thus touching by their emotional impact. The "Outside now" vamp from above he himself was much fond of, because he used it so often. For the 1984 solo on "Guitar" (1987) he returned to the wailing "Watermelon

in Easter hay" theme. Beneath are the theme in its 1984 phrasing and the closing bars of the 1979 version. They go as:



Watermelon in Easter hay (1984), theme. Transcription: KS (the vamp could be taken over from the Guitar book). Update 2005, 3rd printed edition 2007.



Previous page: Watermelon in Easter hay (1979), coda. Source: Guitar book (Transcr. Steve Vai). The Guitar book also includes the drum part in detail, that is roughly followed in the on-line midi file. The accompanying chords above are added by me and I've tried to indicate some of the resonating higher notes, that you can hear individually at the background. They fill in the chord sound during the last bars.

These last two on-line midi files lack the richness and warmth that you can hear on the album. Not only because of sound quality (at least on my pc), but also because my midi editor can't do things as crescendo, decrescendo, glissando and vibrato. To the right: Zappa playing "Watermelon in Easter hay" in 1988 (Barcelona concert).

Both "Outside now" and "Watermelon in Easter hay" are unusual solos in their use of meters. Zappa normally plays over 4/4 in his solos, but these two have odd additional metres, namely 6/8 + 5/8 and 4/4 + 5/4. Apart from the phrasing, the 1984 version of the theme also deviates from the 1979 execution in its rhythm. The one from "Joe's Garage" places the A of the theme on the fourth beat of the vamp, whereas the "Guitar" version does this on the fifth beat. The vamp is a string of nine fourth notes, moving from C# downwards to E over an octave and then going up again to D#. The chords formed by the vamp in the two bars are IV 7th and I 9th of E. The E, being the lowest note of both the vamp and the bass, takes the weight of being the key note, more than the first A of the bass. This gets confirmed by the coda at the end. The core of the guitar motif, played over it at the beginning, is a D#-B-A-G# movement. The D# and B of bar 3 aren't part of the IV 7th chord of the vamp, thus extending the harmonic field to almost the whole scale. Likewise the A of the second bar isn't part of the I 9th chord. The guitar coda, that's eventually played over the vamp on "Joe's garage", is much more in line with vamp (which makes it functioning as a coda so clearly recognizable). It only has an extra V chord added between the two vamping chords. It goes as IV-V-I-V-IV etc., where the root bass note from the IV and I chords is sustained during the V chords. The closing bar contains I being sustained (the E chord).

An earlier version of this composition is coming by as "Watermelon in Easter hay (prequel)" in the "Hammersmith Odeon" section. Other instances to raise our tears are the classical broken heart song "How could I've been such a fool" from "Freak out" and the fragment from "You didn't try to call me", included in the "Cruising with Ruben and the Jets" section.

2.7 A little green rosetta

The original recording of "A little green rosetta" is present in the Läther section. At that point it got combined with an outtake from the later "Ship ahoy". With "Watermelon in Easter hay" the story of "Joe's garage" came to an end, but there was still space left on side 4 of the vinyl album, so Zappa decided to use the "Green rosetta" theme to start a studio jam. The people working at Village Recorders could participate in the chorus. It lasts 8:14, much longer than the original recording that only stated the theme a couple of times before it gets abruptly cut off.

TOUCH ME THERE

In 1979 Zappa produced L. Shankar's album "Touch me there" for his new Zappa Records label. Shankar had made some guest appearances during Zappa's 1978 US tour. See also the previous Halloween section and the YCDTOSA section for "Thirteen". The album consists of five instrumentals with Shankar soloing on electric violin and three songs for which Zappa wrote the lyrics. One of them, "Dead girls of London", is also known via YCDTOSA vol. V. The title track shows Zappa's flexibility. During the seventies he took an anti-love song attitude on his own albums, but this one is a sensitive song, sung by Jenny Lautrec. Apparently Zappa had no problems delivering the lyrics that go as "Touch me there, I like it. Touch me there, again. Touch me there, some more" with several repetitions. On paper rather simple, but in combination with Shankar's music it works.

No more Mr. nice girl

For "No more Mr. nice girl" Shankar and Zappa co-wrote the music, all other music on the album is by Shankar alone. The opening and outchorus are included in this section because it's such a merry feel good song. It opens with a syncopic disco type vamp in A Lydian, with the chord progression I 7th- II. It's followed by a melody in E, played consequently by various instruments. Then follows a violin solo, that ends with the repeated outchorus as presented below. The bass lick from the beginning returns, whereas staff 2 contains a repeated E2 chord. Over this the violins play a sequence of 5th chords, followed by the keyboards, doing a sequence of thirds.



No more Mr. nice girl, theme (Shankar/Zappa). Transcription: KS. Both sections: update 2006, 3rd printed edition 2007.



No more Mr. nice girl, outchorus (Shankar/Zappa). Transcription: KS.

More about collaborating with Shankar in the Documentaries section with "Strat vindaloo". In this song Zappa is creating Indian music. Shankar himself played only western music on "Touch me there".

TINSEL TOWN REBELLION - BUFFALO: FASHIONS

With the title track of "Tinsel town rebellion" (spring 1981) Zappa took a stand against the recent trends in pop music, which he mostly considered empty and phony (see also below). Much of the new styles in pop music since the late seventies till now have to do with sound and not with the structure of the songs. Zappa apparently wasn't interested in having things as a disco beat all through his albums, screaming punk and roaring heavy metal singers, grungy guitars etc. And he could afford not to do so, because his name was by now well enough established to go his own way. Zappa became as unpredictable as ever, coming up with guitar solo collections, modern orchestral music and synclavier albums. Also some material out of his personal interest appeared on CD as the "Uncle meat movie excerpts", "Francesco Zappa" and "Thing-Fish". "Tinsel town rebellion" and "Tinseltown rebellion", without the hyphen, are both correct spellings with the album and CD using both. So there's no "official" choice for which one to use.

1. Fine girl



Previous page: Fine girl, opening. Transcription: KS (update 2005, 3rd printed edition 2007).

The integration of pop styles however, as far as they have to do with song structuring, also continued on his albums. One of the characteristics of Zappa is that he can use all styles without any problem and add unusual extensions to them if he wanted to. "Tinsel town rebellion", for instance, opens with a reggae tune "Fine girl", the only studio track on this album. The rhythm guitar is alternating the I and II chord in C Lydian, mostly on the 2nd and 4th beat, as reggae requires.

In Zappa! he commented about reggae: "I like to play it more than I like to listen to it. Reggae is a ventilated rhythm. If you're going to play a solo with a lot of notes in it and your rhythm accompaniment has a lot of notes in it, then it neutralizes it. I find it more intriguing to play to a reggae background with jagged pulses and big holes in it - there's blank space, whereas the least comfortable thing for me to play to would be a James Brown band" (Zappa!, page 60). Examples of reggae as a vamp in more complex compositions are for instance the 1984 version of "The black page" and "Orrin hatch on skis" from "Guitar" (1987). The opening of the first one is included in the "You can't do that on stage anymore" section of this study. The album cover contains an impressive collage by Cal Schenkel featuring Zappa as a band leader in a ballroom from the twenties. Tinsel Town, a surname for Hollywood, gets referred to in many manners, like including bits of filmtape and images of movie actors. Above and below are two outtakes from this cover.

2. Easy meat

Till "Baby snakes" Zappa mostly made up a live album - or film in this case - from tapes from the same place. With "Sheik Yerbouti" this policy changed to combining the best performances from various concert dates and adding overdubs to them in the studio. Technically he could make use of a velocity regulator. The chances that two separate recordings are exactly in pace together are nil. The advantage is the degree of perfection that can be found on this album. The disadvantage is that it is giving away the idea of being present at a specific concert. With "Tinsel town rebellion" his attitude was again changing in the sense that the number of overdubs was turned down.





Easy meat, opening. Transcription: KS (update 2005, 3rd printed edition 2007).

The second song on "Tinsel town rebellion", "Easy meat", had been on the concert program for two years and shows how well the manipulating of tracks can work out. The album piece is made up of two different concert recordings and has heavy overdubbing on the keyboard sequence. "Ship arriving too late to save a drowning witch" from 1982 is another example of a heavily manipulated album in this positive sense. For

most of his live CDs to come - and that is a lot - Zappa kept combining the best tracks from different occasions, but mostly refrained from overdubbing.

How "Easy meat" was build up in three steps can be followed quite extensively via the different channels in which versions of this song have become available, being nine in total today. All versions have larger guitar solos in them, so it's not an overcopious exhibition.

1978 tour:

- BTB: At the circus. Here the opening of the main melody is the central element of the song. It's present in bars 4-6 of the transcription above, with the line "This girl is easy meat, I've seen her on the street". These bars are used for the introduction as well as as a vamp for the guitar solo. Nor the 1981 opening vamp, nor the instrumental sequence existed in this phase.
- BTB: Saarbrücken. This one goes the same, it's from the same European tour, visiting cities in Germany. There's only a few days gap between this one and the previous one.
- ZFT: Halloween. The same set up from the U.S. leg of the 1978 tour. 1979 tour:
- BTB: Any way the wind blows. Now the characteristic Easy meat riff turns up, as transcribed in bar 1 above. This riff becomes the vamp for the 1979 guitar solos.
- Trance-fusion, Ask dr. Stupid. A guitar solo over this Easy meat riff, so quite obviously it stems from an Easy meat performance.

1980-82 tours:

- Tinsel town rebellion. Easy meat full blown. A "classic" keyboard sequence got added to the song. The guitar solo for these tours has become a pedal note solo instead of the earlier solos over a vamp. Over the introduction with the Easy meat riff a highly syncopic melody is played, as transcribed in bars 2-3 above.
- ZFT: Buffalo. There are only a few days between this version and the Tinsel town rebellion version, the latter combining two performances from the same U.S. tour. On this occasion the syncopic melody is absent. Special for the guitar solo is that Zappa starts a chord progression half way (6:29), that is used by the bass as a vamp for the remainder of this solo.
- The dub room special. The set up in this case is identical to the Tinsel town rebellion version from a year before, the little syncopic melody thus included again. Available on DVD and CD.
- YCDTOSA V. A version from the 1982 European tour, again with the same basic set up, though with some detail differences in the way the main riff is played.

"Easy meat" is in straightforward 4/4, rhythmically easy, except for the syncopic melody in the transcribed bars 2 and three. On "Tinsel town rebellion" it begins with the chord progressions E-B and E-F#. Both E and F# can be interpreted as key notes, thus the scale here can be seen as either E Lydian or F# Mixolydian. In bar 8 it has modulated to F# Dorian. In bars 11-12 you've got chromatic passages on beats 3-4, probably partially improvised.

To the right (on-line version) a screenshot from the 1981 "Talking with Frank Zappa" interview by Chuck Ash of the Pennsylvania State Police about his anti-drugs stand. A quote from this interview regarding punk and new wave:

- Q. What do you think of the punk and the new wave type of music, you're personal opinion of that.
- A. Well, the same truth as of all types of music, there are good examples and bad examples. There are some songs in punk and new wave I enjoy listening to, and there are even a few country and western songs that I enjoy listening to. But generally I'm not a consumer of pop music.
- Q. Do you think that the styles of punk and new wave will last, do you think it will continue.
- A. It will last as long as somebody in the media thinks they can make money of it by perpetuating the myth that it is actually new.

3. For the young sophisticate

"For the young sophisticated" is a shorter song. Zappa first recorded this piece when he was contemplating to release "Läther" as a four record set. At that point it was a cruder version, that you can hear on the ZFT

release of "Läther". It's one of the tracks that Zappa specifically recorded for "Läther", not being part of the tapes that he had handed over to Warner Bros.

4-5. Love of my life - I ain't got no heart

About a third of "Tinsel town rebellion" is made up of new live versions of pieces that Zappa had recorded in the studio earlier. "Love of my life" was first released on album with "Cruising with Ruben and the Jets", but goes back to the Cucamonga period. The Studio Z section from this study contains the opening of the "Tinsel town rebellion" version of this song.

The original studio recording of "I ain't got no heart" is present in the Freak out! section of this study. While "Love of my life" is quite enriched compared to the earlier sixties recordings, "I ain't got no heart" goes basically the same as the studio recording.

6. Panty rap



Previous page: Panty rap, opening. Transcription: KS (update 2006, 3rd printed edition 2007).

The "Panty rap" has a reggae vamp of four bars with two alternating chords. The harmony is the same as in the "Black napkins" vamp, thus an alternation between C# minor and D Lydian. With the D# from C# minor not being actually played in the transcribed bars, it can also be seen as a I-II alternation in C# Phrygian (I'm not hearing a D# anywhere in the song when the C#m chord is played, but I may be missing an instance).

It's an amusing example of how Zappa could entertain his audience by addressing little speeches to them. The word "rap" is used here as a kind of a joke, but "Trouble every day" from 1966 is genuine rap long before it got popular at the end of the eighties. See "Promiscuous" in this study for more about rap.

During the tour of 1980, Zappa stimulated the habit of some of his female fans to throw their underwear on stage. The rap is about collecting these panties and brassieres for making a quilt. It took the artist Emily James more than a year to construct this quilt. There are some pictures of it on the net like at http://www.arf.ru/Misc/Quilt. Zappa returned to the subject in a more bizarre manner on "The man from Utopia" with "The jazz discharge party hats". Even on this subject Zappa isn't really consistent. In the "Panty rap" he's talking about big old ugly cotton jobs (as opposed to bikinis). On "The jazz discharge party hats" it's "traditional cotton, how sweet". To the left: upper left corner of the quilt by Emily James.

7-8. Tell me you love - Now you see it-now you don't

The original studio version of "Tell me you love me" gets dealt with in the Chunga's revenge section. Both versions go largely the same regarding the notes, but the live version is played a bit faster. "Now you see it-now you don't" is a guitar solo from the recent tours, released here as a separate track instead of being part of a song. The song it was part of is probably "King Kong". Zappa cites a few motifs from its main theme between 2:18 and 2:28 and the keyboard returns to these motifs at 4:48, near the end of this track. It's a prelude to the next "Shut up 'n play yer guitar" set, with twenty of such individual guitar solo tracks. It's a pedal note solo in Eb Lydian. Sometimes the bass plays F-Eb, which is probably the reason why Brett Clement in his response to me writes that it can be interpreted as both Eb Lydian and F Mixolydian. In situations like this I'm inclined to take the lower note as tonic.

9. Dance contest

"Dance contest" is one of many examples of Zappa letting the audience participate in a concert. Here it's about people coming on stage with some short dialogues taking place between them and him. On CD it segues into "The blue light", thus suggesting this was the music they were supposed to dance to. These two tracks are from different concerts, so what they actually danced to is left in the dark. Full dancing events can be heard and seen on the "Roxy, the movie" and "Baby snakes" DVDs.



Dance contest, 1:14-1:23. Transcription: KS.

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

Musically "Dance contest" is built around a vamp. It has reached its constant form at 0:35, played around a little from that point onwards. It's a vamp of two bars in E Dorian. The example above contains two instances. Bars 1-2 are the figure in its constant form. For the lower bass line it contains an E going to A, moving over the bar line in a syncopic way, followed by G and A, next going back to E again. According to the bootleg collectors, this piece followed upon "Conehead". Indeed this line can be seen as a continuation upon the "Conehead" bass figure (see the Läther section for a transcription of "Conehead"). On top of that you've got the bass guitar and/or rhythm guitar slapping notes, occasionally accompanied by some keyboard/synthesizer harmony notes in the background. Bars 2-3 of the example are the most disco-like section from the piece, with the heavy four-on-the-floor drum beats. At 2:00 this vamp is left for the "important message for all the cute people all over the world". The bass guitar starts to cite from "I'm so cute" from "Sheik Yerbouti". From 2:22 onwards the piece continues like a more free improvisation.

10. The blue light

"The blue light" is a peculiar song. It has only one recurring theme. It's made up of little blocks with Zappa speech-wise talking, interrupted by motifs played and sung by the band. He would do a lot of such recitatives during his early eighties concerts. See the Man from Utopia section for this topic. It sometimes sounds as if Zappa is improvising, the structure coming over as a bit chaotic. But when you hear the band reacting to the words, you know almost all of it must have been planned and well-rehearsed. Next is the opening of this song.







The blue light, opening. Transcription: KS. Update fall 2017, deposited at the I-depot, The Hague.

- Bars 1-4. This is another example of Zappa using two meters simultaneously. The bass keeps playing a lick, forming the A7 chord (no third). Combined with the guitar part of staff three, playing mostly the A chord, the overall sound of the rhythm section shows an extensive use of the dominant 7th chord in A Mixolydian. Over this the guitar from staff two is playing a progression/little melody with 7/4 as length. It's being played around the chord progression I-IV-I 7th-I (5th or 7th) -I, followed by the melodic line A-B-G-A-F#-G-E-F#. These figures are played twice, with the second guitar sometimes participating. I've notated this in 4/4, indicating the part in 7/4 with dashes.

- Bars 4-14. Sustained chords by the keyboards with the bass continuing with its lick. The chord progression is I-I-VII-IV, followed by an evasive C-chord, implying a modulation to A minor/Dorian at the end (bar 14). The I chord combined with the bass lick is continuing with letting the dominant 7th sound. The guitars continue in the background with feedback notes. They are playing freely and irregular, with the transcription only approximating their movements. At several points there's also a very high unintended feedback audible, that I've not included. Most chords are entering off beat.
- Bar 15. First bar with Zappa speech-wise singing with only the drummer continuing (so far this example has been instrumental).
- Bar 16-17. The band reacts along the Ab and G chords.
- Bar 18. Second episode with Zappa speech-wise singing, now accompanied by high keyboard chords. This process continues till towards the end the progression from bars 4-14 returns as, what now turns out to be, the main theme/chorus of the song.

11-12. Tinsel town rebellion - Pick me, I'm clean

To the right Zappa as a band leader in a ball room from the twenties. The title track doesn't refer to the twenties, but recent trends in pop music. Zappa did refer to pre-war music with "It's from Kansas" and "Bow tie daddy", both examples being present in this study. Interesting is the other live version on "Does humor belong in music?". This one contains a number of amusing references to pop clichés. Ballroom music is present in the first "Paroxysmal splendor" example from this study, Chicago '78 section.

In 2006 the ZFT released the whole 1980 Buffalo concert as a double CD, complementary to "Tinsel town rebellion". It offers 26 tracks, all including alternative bars to a more or lesser extent. Some songs are more basic versions, like "You are what you is" without the vocal overdubs. Others can be quite interesting variations upon the original as the "Honey, don't you want a man like me" version (see the YCDTOSA section of this study). "The torture never stops" gets dealt with in the Man from Utopia section. It's remarkable to see that many differences between the "Buffalo" and the "Tinsel town rebellion" version of "Pick me, I'm clean", because they are both from the U.S. fall tour. Some of the differences are:

- The "Tinsel town rebellion" version has an instrumental intro with a little theme entirely of its own. It's made up of a chord progression over a bass motif in D Mixolydian. Rhythmically these chords can be on beat, off beat and before beat, seeking for variation within a 4/4 meter. The "Buffalo" intro is made up of

- The "Buffalo" version goes much faster than the "Tinsel town rebellion" version.

an instrumental execution of the opening theme of the song, followed by two transitory bars.

- The bass during the opening theme on "Buffalo" plays parallel with this theme, whereas on "Tinsel town rebellion" it plays a little riff of its own. Harmonically this opening theme is based upon a I-VII alternation in C Lydian, repeated four times, after which it ends with the III 9th chord in bar 13.
- Both executions have a fine C Lydian solo in them. The "Buffalo" solo is much longer and wouldn't have been misplaced in the "Shut up 'n play yer guitar" collection. In both solos the bass starts off alternating C and D. At various points they are moving more freely. On "Buffalo", for instance, the bass takes over a guitar motif at 7:00 and starts varying this motif in 3/4.



Previous page: Pick me, I'm clean, opening (Tinsel town rebellion). Transcription: KS. Update 2008, deposited at the I-depot, The Hague.



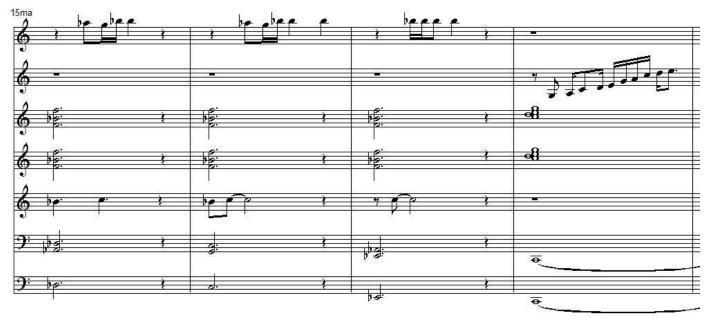
Pick me, I'm clean, section (Buffalo). Transcription: KS. Update 2008, deposited at the I-depot, The Hague.

There are also some differences in sound quality and production techniques etc. Zappa isn't there anymore to select the best parts of a tour and apply his knowledge as a producer. I know too little about recording techniques to know what might cause this, lesser equipment available at a specific concert or studio editing and mixing. You can for instance notice that the solo on "Buffalo" isn't double channeled. The temporary setback at 4:57 to a two track recording appears to have been caused by a hiss on the multitrack tape. Better solve it this way than miss the solo.

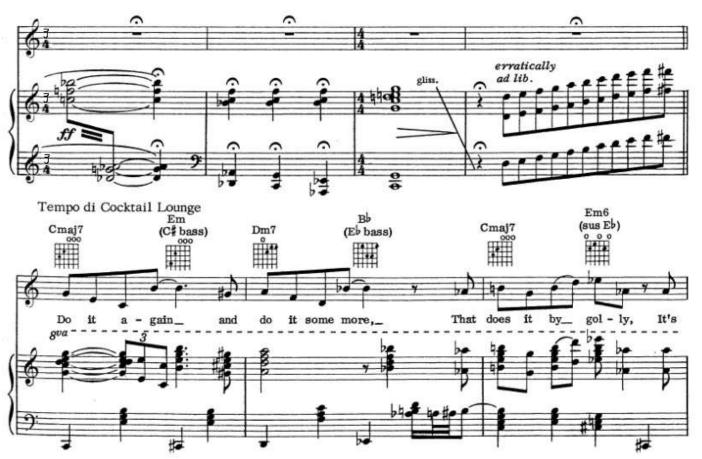
13-14. Bamboozled by love - Brown shoes don't make it (1981)

Like "Your mouth", "Bamboozled by love" has ugly lyrics about violent thoughts within a relationship when jealousy gets into the picture. Regarding song structuring "Bamboozled by love" and "Brown shoes don't make it" are opposites. The first follows the regular verse-chorus structure, the second comprises a multitude of themes, styles, meters, harmonies etc. "Brown shoes don't make it" first appeared on record in 1967. Two examples from "Brown shoes don't make it (1968)" are presented in the Absolutely free section. This live version is very welcome. Not only are there many version differences at a detail level, it's also pleasant to be able to hear this song with the level of sound quality Zappa had reached around 1980.





Brown shoes don't make it (1981), 4:05-4:25. Score/transcription: Songbook, adapted to the Tinsel Town Rebellion version by KS.



Bars from Brown shoes don't make it (1981). Songbook, page 19.

The example above is the interlude, starting at 4:05. It contains:

- Bars 1-2: Rhythmically this section begins with a pedestrian beat in 3/4. It's in D Lydian with the total harmony being extended to I 13th. Only the C# isn't involved.
- Bars 3-5: A chord progression built around II-III-VII-V-VII-VI. It's done in a manner that various chord types are passing by: triads, suspended chords, 7th chords and larger chords. In the descant line the use of parallel fifths can be discerned.
- Bars 6-7: Melodic lines in A Dorian. Beat three of bar 7 suggests another modulation, but this doesn't get confirmed in bar 8.
- Bar 8: Instead the music jumps overnight into a sustained dissonant chromatic chord.
- Bars 9-11: A sustained Bbsus2 chord for the descant, further harmonized in three different manners by the bass. Subsequently the combinations are:
- a) Ab-Db-Bb-C-F.
- b) G-C-Bb-(C)-F.
- c) Eb-Ab-Bb-C-F.

These combinations belong to the same diatonic scale but there's no active tonic here (it floats). In the Songbook bars 8-11 from above are notated as indeterminately held notes in two bars. Because I'm executing my transcriptions as midi files too (on-line version), I've notated these bars in a manner that they approach what's going on on the CD. It's played as sort of in 4/4, when you allow an amount of rubato.

- bar 12(-13): Another modulation to C. Here the midi file stops, but above I've included some more bars from the Songbook as an example of the many style changes during this composition. It indicates "Tempo di Cocktail lounge". Harmonically it's quite complex, as is also "America drinks and goes home" from "Absolutely free". Here it's built over a chromatic bass line, C-C#-D-Eb-C-C#, touching upon chords from various diatonic scales. Next are some more styles passing by.





Brown shoes don't make it, 3:06-3:32. Score from the Songbook, adapted to the album version by KS.



Brown shoes don't make it. Songbook, page 17.

This block is described as a slow shuffle in the Songbook. Rhythmically the Songbook goes quite different from the album version, so I've included both as score and midi file (on-line) alike.

- Bars 1-5: While the Songbook is using the quarter and eighth notes as time unit, it's all triplets on the album. The album version could be notated in 12/8 just as well. The sung part from staff one is close to speech-wise singing, so you might choose to notate the pitches with crotches. Notable is the A-Ab (G#) dissonance in the bass. Otherwise is contains a series of regular triads. The Songbook and the album are using the same notes for the bass part from bars two, four and six, but in a reversed following order. At this point the song is in A minor.
- Bar 6. A pattern breaking bar with quintuplets. It's atonal and deliberately irregular. In cases as this Zappa found the rhythm and irregularity itself more important than playing the exact notes (see also

"Approximate" and "Don't you ever wash that thing"). On the album you've got three people playing them with some amount of freedom compared to the Songbook. The transcription is by approximation (I can't distinguish every single note these people are playing).

- Bar 7. A bar in Ab Mixolydian, making use of parallel fifths.
- Bar 8. An abrupt modulation to what you might call C# Dorian.
- Bar 9. A transitory bar.
- Bar 10. The first bar of a block called "Fast Motown" in the Songbook. In the Songbook it's notated in 8/8 with the word fast indicating that it should be played much faster than the previous slow shuffle block. On the album the tempo gets doubled, so I've notated it as switch from 4/4 to 4/8.



Bars from Brown shoes don't make it. Source: Songbook, page 22.

This last section is played between 5:28-5:39 on the album, called corny swing. Nominally it's in Bb, but with chromatic passing notes and evasions to for instance a G7 chord in bar 2. When he originally wrote this song, Zappa didn't have daughters yet. In 1979, when this version of the song was recorded, he had two younger daughters himself. "What would you do, daddy?" got replaced by band members asking a more general "What would you do, Frankie?".

15. Peaches III





Peaches III, section. Transcription: KS (lead melody in bars 1-4 by W. Ludwig). Update 2013, deposited at the I-depot, The Hague.

"Peaches III" is the third version of "Peaches en regalia" in Zappa's own CD catalogue. For all three instances the main melody and the structure of the song are the same, so the differences lie in the instrumentation, chords and accompanying lines. See the Hot rats section for the opening bars of the first recording of "Peaches en regalia" from 1969. The second recording appeared shortly afterwards on

"Fillmore East", a live recording with Flo and Eddy singing part of the melody (without text). Zappa decided to release the 1979/1980 live version as well on "Tinsel town rebellion" because of the weirdness included. This applies specifically to the part below, the end of the original song, and the ensuing concert finale. This finale takes up the last two minutes of the song and is not specifically related to the themes from "Peaches en regalia". It just happened to be the last song of the program.

For bars 1-3 and the first half of bar 4 all staves are played on odd sounding synthesizer keyboards. The lead melody in staff 2 is played on two different sounding synthesizers for the left and right channel of the stereo field. In bar 2 you have somebody saying "Brothers and sisters" in the background, just like that without further context. Most of this example is in 4/4, with the rhythm on beat. The quintuplet and triplet for the lead melody in bar 3 create a nice acceleration and slowing down again effect. The figure in bar 4, staff 3, is improvised. The example in the Hot rats section shows more of the rhythmic variation that you can encounter in this song. This part of "Peaches III" is in B minor and two uncommon variants upon this scale. At various points you have the C# and F# altered to natural, so what is getting used here is:

- B-C#-D-E-F#-G-A: normal B minor (Aeolian).
- B-C#-D-E-F-G-A: B minor variant with F natural.
- B-C-D-E-F-G-A: B Locrian.

The opening of "Peaches en regalia" is in B Dorian with a G# as well for what I call theme A in the Hot rats section. This specific section is theme B repeated three times in different settings. For theme B the G is always natural. Bars 5-12 of the example here are in normal B Minor (Aeolian). In bars 1-3 and the first half of bar 4, Zappa is using a bass line specific for the "Peaches III" version. It has an F natural in it. So for bars 1-2 it's the variant with F natural. In bars 3-4 the C# also becomes natural. Of the seven theoretically possible diatonic scales, Phrygian and Locrian are usually only mentioned for completeness in harmony text books. They start with a minor second and specifically Locrian is seldom used. Zappa uses Phrygian every once in a while, but Locrian is also in Zappa's music an obscurity. It just happens here that you get the complete Locrian scale for a short period. The original melody applies the C natural as an altered note and here it occurs in combination with a bass figure that consistently uses an F natural. In bar 5 the music has turned to normal B minor and the C natural in bar 7 can be seen as a normal altered note. The odd synthesizer sounds have vanished as well. The harmonies are different from the "Hot rats" version, but also here triads are combined with wider chords. Especially the progression in bars 7-8 is making use of extended chords as D 11th. In bars 11-12 the standard "Peaches en regalia" melody comes to an end. These two final bars are played in a slower tempo. The last D note of bar 11 doesn't lead to an E, as in bar 8, but keeps being sustained for another 3/4 bar. Next the oddities return with the atonal bars 13-14, that lead to the concert finale.

SHUT UP 'N PLAY YER GUITAR: MODES

"Joe's garage" and the 1981 live album "Tinsel town rebellion" show the growing importance of Zappa's guitar soloing on his albums. The first one with Joe's imaginary guitar solos, the second one having two complex ones on "Easy meat" and "Now you see it, now you don't". From 1970 onwards Zappa recorded almost all of his gigs, always including several guitar solos. The majority of the solos are improvised all through, only the accompaniment type and meter are agreed upon in advance so that the band knows what to do. Zappa's guitar solos aren't meant to show off technically (Zappa hasn't claimed to be a big virtuoso on the instrument), but for the pleasure it gives trying to build a composition right in front of an audience without knowing what the outcome will be.

Zappa wanted to compile an album with his guitar solos for some time, but Warner Bros. weren't cooperative. Now he had new chances. The 1981 three record set "Shut up 'n play yer guitar" contains two hours of soloing, mostly taken from the 1979 and 1980 tour, and it sold above expectations. Thus reinforced he could do it again in 1987 with a two CD set, briefly called "Guitar", with solos mostly recorded between 1981 and 1984. And yet again for the 1988 tour with "Trance-fusion" (see the "Guitar" and "Trance-fusion" section for the latter collections). When you're unfamiliar with them, these two large issues combined with the many guitar solos on the regular albums, may very well lead to some prejudice that music in such quantities can't be good. But when you start listening carefully you can also come to the opposite conclusion that his level is always high and that he just can't miss. Both views don't appear to be accurate. As Zappa himself pointed out in "The Real Frank Zappa book" the number of released guitar solos is only a fragment of the recorded number and most guitar solos didn't work out. The issues are the result of listening to all tapes and selecting the best ones.

In 1979 Zappa hired the virtuoso guitar player Steve Vai to transcribe a number of his guitar solos, which he continued to do till 1981. The transcriptions included most of the "Joe's Garage" solos, more than half of the "Shut up 'n play yer guitar" solos and a few others. They were published in 1982 as the 300 pages issue "The Frank Zappa guitar book" (cover to the right, publisher Munchkin Music). Steve Vai made the transcriptions with a great deal of accuracy, including a broad range of irregular rhythmic groupings and some occasional quartertones. Zappa's improvised speech influenced rhythms frequently look horrible on paper (see for instance the bars from "Shut up 'n play yer guitar" below). Whereas Zappa took all rhythmic freedom during his solos and used all types of chords, he wanted the accompaniment to remain simple, playing in a constant metre and with easy harmonies. Mostly he is playing over a pedal note, two alternating chords or a vamp (alternating chords may also be called a vamp, but in this study I'm treating alternating chords as a separate category). He needed this to build a contrast with his own soloing; if the accompaniment would play with a flexible metre, it would become everybody playing rubato, he noted in "The Real Frank Zappa book". Zappa's early solos can be relatively friendly from the rhythmical point of view as the "Orange County" solo from the Roxy and elsewhere section and the "Call any vegetable" solo from the Beat the boots section. Zappa's later solos however are full of these wild irregular rhythmic groupings. Also the drum parts during the later solos had become very vivid and complex and totally different from the elementary drumming of Jimmy Carl Black during the sixties.

Zappa's preference to keep playing in one key becomes clear by looking through the pages of the "The Frank Zappa guitar book" and the transcribed sections in this study. Also in the pieces that use more scales, the scales are closely related with only the keynote changed or one or two notes altered, and the modulations are never abrupt. See also the Guitar section for more upon this topic. The scales of the "Shut up 'n play yer guitar" solos are given beneath, with some comment on the choice of the keynote (several of them are indicated in the Guitar book, others by me). These keynotes of the scales are given by the accompaniment. It doesn't mean that the solo has to open on the keynote or confirm it (often it doesn't), but that it's using the notes of that key. As an exception to the rule can be taken the ending of "Black napkins" from "Zoot Allures". The piece is using the closely related keys of C sharp Minor (Aeolian)/Dorian and D Lydian, that differ by one or two notes (D sharp versus D natural; see also the

remarks about the A/A# at the "Pink napkins" example below). At the end there's a sudden change to the unrelated scale of G Dorian (the bass is here playing a G pedal note). This change takes place at the 8th bar on page 300 of "The Frank Zappa guitar book" or at 3:41 on the CD. After playing up and down through this scale the solo ends in A Dorian (pedal A). In 2010 the ZFT released "Hammersmith Odeon", where you can hear Zappa soloing over two unrelated keys during "King Kong" (see the Hammersmith Odeon section). Next is a table of the scales used for the 73 guitar solo examples from this study. When you compare this table to the general one from the Burnt weeny sandwich section, it leads to two conclusions:

- It confirms Zappa's preference to stay in one scale, as already mentioned. The solos normally follow just one scale, whereas in the general table the examples often have more than one scale or the scales are varying thus rapidly that I didn't assign the example to specific scales. So the solos are different from Zappa's composed music, where frequent modulations are normal.
- For his solos Zappa has a preference for the three modal scales: Dorian, Lydian and Mixolydian. This is other than for his music in general, that uses these scales as more equal to major and minor, though also in general you have a preference for Dorian over minor as it comes to the minor type scales.

- Major	10
- Dorian	50
- Phrygian	5
- Lydian	21
- Mixolydian	34
- Minor/Aeolian	12
- Others and varying	19

1	USE OF KEYS IN THE TRANSCRIBED								
2	GUITAR SOLO BARS IN THIS STUDY								
3	Title	Acc. type	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Others
4	Lost in a whirlpool	Blues		E					
5	Walkin' out	Chord progr.					D/A/E		
6	Waltz (Pal records)	Jazz		D			D		
7	Speed-freak boogie	Vamp		E					
8	Breaktime	Jazz		С					
9	Bossa Nova	Vamp			G				
10	Mondo Hollywood	Vamp		E					
11	Hungry freaks, daddy	Follows song					A/E	E	Pentatonic
12	Invocation & ritual dance solo	Pedal note		E					
13	Theme from Burnt weeny sandwich	Pedal note/vamp					D		
14	Get a little	Pedal note		E			E		
15	Lumber truck solo	Pedal note		F#					
16	Baked-bean boogie	Pedal note		Eb					
17	No waiting for the peanuts to dissolve	Vamp							Pentatonic
18	Transylvania boogie	Pedal note/vamp		E			Α		Gypsy scal
19	The Nancy and Mary music	Pedal note/vamp		Eb					
20	Twinkle tits	Pedal note		E					
21	Chunga's basement	Vamp		D					
22	Holiday in Berlin solo	Altern. chords				D			
23	Call any vegetable solo (1970)	Chord progr.		E					
24	Call any vegetable solo (1971)	Pedal note		Α			Α		
	Subcutaneous peril	Pedal note		D					
26	Brixton still life	Vamp					D		
27	The grand wazoo	Vamp		D					
28	Another whole melodic section	Chord progr.							Varying
29	Think it over	Pedal note		D					

3	Title	Acc. type	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Others
30	Big swifty	Pedal note			E		E		
31	Waka/Jawaka	Pedal note				Α	A/G		
32	Greggery Peccary mov. III	Pedal note						E	
33	Imaginary diseases	Vamp		В					
34	Rollo	Pedal note		E					
35	D.C. Boogie	Pedal note					D		
36	Fifty-fifty	Modulation scheme	Db	С		Db	C/Ab/Cb		
37	Apostrophe	Duet						В	
38	Uncle remus	Chord progr.							Varying
39	Stink-foot	Vamp					С		
40	Orange County	Altern. chords				E			
41	Pygmy twylyte	Pedal note						В	Minor type
42	Sheik Yerbouti tango	Pedal note						F	
43	Inca roads solo	Altern. chords				С			
44	Muffin man	Vamp		F#					
45	Duke of prunes (1975)	Vamp			G#				
46	RDNZL	Altern. chords	Α			Α			
47	Phyniox	Modulation scheme	Ab		С	Ab	Ab		
	Reeny ra	Vamp							Locrian
49	Any downers? (1975)	Altern. chords						F#	
50	Keep it greasy (1979)	Vamp		G					
51	Black napkins	Altern. chords				D		C#	
52	Chunga's revenge, rhythm guitar solo	Pedal note		D					Varying
	Zoot allures	Chord progr.	E						Varying
54	Friendly little finger	Pedal note							Varying
	Filthy habits solo	Vamp			С			С	

3	Title	Acc. type	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Others
56	Sleep dirt	Chord progr.							Varying
57	Ship ahoy	Pedal note		D			D		
58	Conehead instrumental (1977)	Vamp					Bb		
59	Conehead (1978) solo	Vamp		F					
60	Bowling on Charen	Various					В		
61	Mo' mama	Pedal note					E		
62	Yo' mama	Altern. chords					E		
63	Watermelon in Easter hay (H.O.)	Vamp	E						
4	King Kong (H.O.)	Altern. chords		Eb		D			
5	Heidelberg	Pedal note					E		
6	Paroxysmal splendor	Pedal note		Α			Α		
7	Ancient armaments	Pedal note		Α					
8	Occam's razor	Altern. chords				C			
9	On the bus	Vamp		Α					
0	Watermelon in Easter hay	Vamp	E						
1	Pick me, I'm clean solo	Altern. chords				C			
2	Five-five-FIVE	Chord progr.							Varying
3	Shut up 'n play yer guitar	Altern. chords				C			
4	While you were out	Pedal note		D					
75	Treacherous Cretins	Vamp	Α					D	
76	Soup 'n old clothes	Pedal note		D					
77	Gee, I like your pants	Altern. chords				С			
8	Canarsie	Vamp							Atonal
9	The deathless horsie (1979)	Pedal note						C#	
30	The deathless horsie (1984)	Vamp					В		
	Pink napkins	Altern. chords		C#		D			
32	Return of the son of Shut up 'n	Altern, chords				С			

3	Title	Acc. type	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Others
83	Why Johnny can't read	Pedal note			,,,	,	E		
84	Canard du jour	Pedal note						G	
85	Stevie's spanking	Chord progr.					Α		
86	Drowning witch, solo #1	Vamp						Α	
87	Drowning witch, solo #2	Pedal note		В					
88	Theme from Sinister footwear III	Pedal note				F			
89	The torture never stops (1980) solo	Pedal note		Α					
90	Marque-Son's chicken	Altern. chords							Octatonic
91	Them or us	Pedal note				Bb			
92	For Giuseppe Franco	Chord progr.							Varying
93	Sexual harassment in the workplace	Blues						C#	
94	Republicans	Pedal note							Varying
95	Do not pass go	Pedal note		В					
96	In-a-gadda-stravinsky	Vamp/pedal note	D	D		D	D		
97	That's not really reggae	Pedal note		Α					
98	Jim and Tammy's upper room	Pedal note		G					
99	Once again, without the net	Pedal note				D	D		
100	Were we ever really save in San Antonio?	Pedal note		В					
101	Hotel Atlanta incidentals	Pedal note		Eb					
102	That's not really a shuffle	Pedal note		Eb					Mixed
103	Sunrise redeemer	Vamp					E		
104	Orrin hatch on skis	Vamp		D			D		
105	For Duane	Pedal note		Α					
106	GOA	Pedal note					D		
107	Swans, what swans?	Pedal note				Bb			
108	Things that look like meat	Vamp		G					
109	System of edges	Altern. chords				С			

3 Title	Acc. type	Major	Dorian	Phrygian	Lydian	Mixolydian	Minor	Others
110 Too ugly for show busines	s Pedal not	e				D		
111 Canadian customs	Pedal not	e						Varying
112 King Kong (1982)	Vamp		Eb					
113 Heavy duty Judy (1988)	Vamp					E		
114 The torture never stops, p	art II Pedal not	e	Α					
115 The black page (1988)	Altern. ch	ords F						
116 Zomby woof	Vamp		Α					
117 Good Lobna	Pedal not	e	F#					
118 Butter or cannons	Pedal not	e						Irregular
119 Ask dr. Stupid	Vamp		F#					
120 Trance-fusion	Vamp		D					
121 Diplodocus	Vamp		Eb					
122 Soul polka	Vamp		C#					
123 Light is all that matters	Vamp							Irregular
124 Bavarian sunset	Pedal not	e E						
125 Improvisation in A	Pedal not	e				Α		
126 Budapest solo	Pedal not	e				D		
127 Strat Vindaloo	Vamp							Indian
128 Dance me this	Pedal not	e				F		

Another thing to note is that there is a relationship between the accompanying type of a solo and the choice for a scale. The Guitar section continues with the subject of accompanying types. Of the 13 solos with alternating chords 8 are a I-II alternation in Lydian; three have two alternating scales including Lydian. Only "Yo' mama" and "Bowling on Charen" are in Mixolydian. For solos using alternating chords Zappa thus has a clear preference for Lydian. When you get at the solos, using a bass pedal note or a vamp, it's the other way round. These solos form the majority and the larger part of them are in Dorian or Mixolydian. The "Theme from Sinister Footwear III" is an example of a pedal note solo in Lydian in my study. This is not exceptional though, because you've got more of them on "Guitar" and "Trance-Fusion", like the "Them or us" variants "Move it or park it" and "Do not try this at home" (Bb Lydian).

TABLE WITH THE SCALES AND TYPES OF ALL GUITAR SOLOS

When you're looking at all guitar solos, you're getting the picture below. Most solos are part of a song or outtakes from a song. They are listed by their title. So I've included recurring songs like "The torture never stops" once. But the number of C Lydian solos, that are outtakes from "Inca roads", are listed separately by their individual titles. The table with the overview of types and scales includes the normal diatonic examples, which are most of the solos. Only occasionally you can have an irregular or chromatic solo, the gypsy scale or something in Locrian. The titles in bold have excerpts included in my study.

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
3					-				
4	1 FREAK OUT								
5	Hungry freaks, solo		В			A/E	E		Follows song
6									_
7 2	2 ABSOLUTELY FREE								
8 1	Invocation & ritual dance		C#/E						Pedal note
9									
10 :	3 WE'RE ONLY IN IT FOR THE MONEY								
11									
	4 LUMPY GRAVY								
13									
14	5 CRUISING WITH RUBEN AND THE JETS								
15	Stuff up the cracks, solo					C			Vamp
16									
	6 MOTHERMANIA								See the original CDs
18									
19	7 UNCLE MEAT								
	Nine types of industrial pollution		Bb						Pedal note
21									
22	8 HOT RATS								
	Willy the pimp, solo		Α						Pedal note
	Son of Mr. Green Genes	C	D/Bb			Bb			Alternating chords
25									
	9 BURNT WEENY SANDWICH								
	Theme from Burnt weeny sandwich					D			Pedal note/vamp
	Holiday in Berlin, full blown, solo				D				Alternating chords
29									
	10 WEASELS RIPPED MY FLESH								
	Get a little		E			E			Pedal note
32	The orange county lumber truck, solo		F#						Pedal note

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
33									
34	11 CHUNGA'S REVENGE								
35	Transylvania boogie (1970)		E			A			Also gypsy scale
36	Road ladies, solo		D						Blues
	The Nancy and Mary music, solos		Eb/D						Pedal note/vamp
38									
39	12 FILLMORE EAST								
40	Willy the pimp								See Hot rats
41									
	13 200 MOTELS								
43	Magic fingers, solo		Α						Pedal note
44									
45	14 JUST ANOTHER BAND FROM LA								
46	Call any vegetable, solo		Α			A			Pedal note
47	Dog breath, solo		F#						Pedal note
48									
	15 WAKA/JAWAKA								
50	Big swifty								
51	solo, block 1			E					Pedal note
52	solo, block 2					E			Pedal note
53	It might just be a one shot deal, solo	G							Vamp
54	Waka/Jawaka, solo		Α		Α	A/G			Pedal note
55									
	16 THE GRAND WAZOO								
57	The grand Wazoo, solo		D						Vamp
	Blessed relief, solo	E	A/G/F#						Modulation scheme
59									
	17 OVERNITE SENSATION								
61	Dirty love, solo					D			Pedal note
	Fifty-fifty, solo	Db	С		Db	X			Modulation scheme
63	Zomby woof, solo		Α						Pedal note

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
64	Montana, solo		F#						Pedal note
65									
66	18 APOSTROPHE (')								
67	Cosmic debris, solo		С						Blues
68	Apostrophe, solo		В				В		Pedal note
69	Stink-foot, solo					С			Vamp
70									
71	19 ROXY AND ELSEWHERE								
72	Penguin in bondage, solo		D						Blues
73	Don't you ever wash that thing, solo		F#						Blues
74	Orange County, solo				E				Alternating chords
75	More trouble, solo		F#						Pedal note
76	Be-bop tango, solo					В			Blues
77									
78	20 ONE SIZE FITS ALL								
79	Inca roads, solo				C				Alternating chords
80	Can't afford no shoes, solo		E			E			Pedal note
81	Pojama people, solo		D						Pedal note
82	Andy, solos		F#		Α				Pedal note
83									
84	21 BONGO FURY								
85	Carolina hard-core ecstasy, solo				F				Vamp
86	Advance romance, solo		G						Pedal note
87	Muffin man, solo		F#						Vamp
88									
89	22 ZOOT ALLURES								
90	Black napkins		C#		D		C#		Alternating chords
91	The torture never stops, solo		G						Pedal note
92	Friendly little finger								See the example in my study
93	Wonderful wino, outro		Α						Pedal note
94	Zoot allures								

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
95	intro								Chords from various scales
96	theme	X							Chord progression
97	solo		C#						Pedal note
98									
99	23 ZAPPA IN NEW YORK								
100	Cruising for burgers, solo					D			Vamp
101	I promise not to come, solo		F#		X				Pedal note
102	The Illinois enema bandit, solo		D						Vamp
103	Punky's whips, solo		C#						Pedal note
	The purple lagoon/Approximate, solo					F			Pedal note
105									
106	24 STUDIO TAN								
	Music for low budget orchestra, solo					D			Pedal note
	RDNZL, solo	Α			Α				Pedal note
109									
110	25 SLEEP DIRT								
	Filthy habits, solo			F/C			F/C		Vamp
	Sleep dirt								Chord progression
	The ocean is the ultimate solution		X			X			Pedal note
114									
	26 SHEIK YERBOUTI								
	Rat tomago		Bb						Pedal note
	Sheik Yerbouti tango						F		Pedal note
	Yo' mama, solo					E			Pedal note/Alternating chords
119									
	27 ORCHESTRAL FAVORITES								
121	Duke of prunes, solo							Various	Follows song
122									
	28-29 JOE'S GARAGE								
	On the bus		A						Pedal note
125	Keep it greasy, solo		G						Vamp

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
126	Outside now, solo				Bb				Vamp
127	He used to cut the grass, solo				E	F#			Pedal note
128	Packard goose, solo					F#			Vamp
129	Watermelon in easter hay	E							Vamp
130									
131	30 TINSEL TOWN REBELLION								
132	Easy meat, solo				E	F#			Pedal note/alternating chords
133	Now you see it, now you don't				Eb				Pedal note
134	Pick me, I'm clean, solo				С				Alternating chords
135	Bamboozled by love, solo		Α						Blues
136	-								
137	31-33 SHUT UP 'N PLAY YER GUITAR								
138	Five-five-FIVE								Chord progression
139	Hog Heaven				E				Pedal note
	Shut up 'n play yer guitar		Α		С				Alternating chords
141	While you were out		D			D			Pedal note
142	Treacherous cretins	Α					D		Vamp
143	Heavy duty Judy					E			Vamp
144	Soup 'n old clothes		D						Pedal note
145	Variations on the Carlos Santana		G						Vamp
146	Gee, I like your pants				С				Alternating chords
147	(Canarsie)								Chromatic
148	Ship ahoy		D			D			Pedal note
149	The deathless horsie		C#		A	В	C#		Vamp
150	Shut up 'n play your guitar some more				C				Alternating chords
151	Pink napkins		C#		D				Alternating chords
152	Beat it with your fist		Α						Pedal note
153	Return of the son of				С				Alternating chords
154	Pinocchio's furniture		D						Pedal note
155	Why Johnny can't read					E			Pedal note
156	Stucco homes					D			Pedal note

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
	Canard du jour					A	G		Floating
58									
	34 YOU ARE WHAT YOU IS								
	Sinister footwear III				F				Pedal note
61									
	35 DROWNING WITCH								
63	I come from nowhere, solo		В						Pedal note
64	Drowning witch								
65								Irregular	Vamp
66	solo 2		В						Pedal note
67									
	36 THE MAN FROM UTOPIA								
69									
	37 BABY SNAKES								See the first releases
71									
72	38 THE LSO, VOL. I								
73									
	39 THE PERFECT STRANGER								
75									
76	40 THEM OR US								
77	Ya Hozna, solo		C						Vamp
78	Sharleena, solo (1984 studio)					G			Pedal note
	Sinister footwear II, solo			G					Vamp
80	Truck driver's divorce, solo					A			Pedal note
	Stevie's spanking, solo					A/B			Vamp
82	Marque son's chicken, solo							Octatonic	Alternating chords
83	Them or us				Bb				Pedal note
84									
	41 THING-FISH								
86									
87	42 FRANCESCO ZAPPA								No compositions by F

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
188									
189	43 THE OLD MASTERS, VOL. I								See the original CDs
190									
191	44 THE MOTHERS OF PREVENTION								
192	Alien orifice		E/G		Eb/C				Pedal notes
193	What's new in Baltimore	E							Alternating chords
194									
195	45 DOES HUMOR BELONG IN MUSIC?								See the first releases
196	Zoot allures, solo (1984)					A			Pedal note
197	Hot plate heaven at the Green hotel, solo		E			A			Pedal note
198	Let's move to Cleveland, solo				C/Ab	D			Pedal note
199									
200	46 THE OLD MASTERS, VOL. II								See the original CDs
201									
202	47 JAZZ FROM HELL								
203	St. Etienne		В						Pedal note
204									
205	48 THE LSO, VOL. II								
206									
207	49 THE OLD MASTERS, VOL. III								See the original CDs
208									
209	50 GUITAR								
210	Sexual harassment in the workplace						C#		Blues
	Which one is it				Bb				Pedal note
212	Republicans							Irregular	Pedal note
213	Do not pass go		В						Pedal note
214	Chalk pie					A			Pedal note
	In-A-Gadda-Stravinsky	D	D		D	D			Vamp/pedal note
216	That's not really reggae		Α						Pedal note
217	When no one was no one					A			Pedal note
218	Once again, without the net				D	D			Pedal note

	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
219	Outside now								See Joe's garage
220	Jim and Tammy's upper room		G						Pedal note
221	Were we ever really safe		В						Pedal note
222	That of G minor thing again		G						Vamp
223	Hotel Atlanta incidentals		E						Pedal note
	That's not really a shuffle		Eb					Mixed	Pedal note
225	Move it or park it				Bb				Pedal note
226	Sunrise redeemer					E			Vamp
227	Variations on Sinister footwear #3				E				Pedal note
228	Orrin hatch on skis		D			D			Vamp
229	But who was Fulcanelli					E			Pedal note
230	For Duane		Α						Pedal note
231	GOA					D			Pedal note
	Winos do not march					G			Alternating chords
233	Swans, what swans?				Bb				Pedal note
	Too ugly for show business					D			Pedal note
235	Systems of edges				С				Alternating chords
236	Do not try this at home				Bb				Pedal note
237	Things that look like meat		G						Vamp
	Watermelon in easter hay								See Joe's garage
239	Canadian customs							Irregular	Vamp
240	Is that all there is				С				Pedal note
241	(It ain't necessarily)							Cover	
242									
243	51 YCDTOSA, VOL. I								See the first releases
	The mammy anthem		Ab						Pedal note
245	-								
246	52 YCDTOSA, VOL. II								See the first releases
	Pygmy twylyte, solo						В		Pedal note
248									
249	53 BROADWAY THE HARD WAY								

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
250	Any kind of pain, solo				F				Alternating chords
251									_
252	54 YCDTOSA, VOL. III								
253	Sharleena, solo (1984 live)					G			Alternating chords
254	Ride my face to Chicago, solo		D			D			Vamp
255	Dickie's such an asshole, solo		В						Blues
256	Nig biz, solo					G			Blues
257	King Kong (1971/82), solos		Eb			A			Chords/vamp
258									
259	55 THE BEST BAND YOU NEVER HEARD								
260	Heavy duty Judy (1988)					E			Vamp
261									
262	56 MAKE A JAZZ NOISE HERE								
263	Fire and chains					D			Pedal note
	Star wars don't work		D						Pedal note
265	The black page (1988), solo	F							Alternating chords
	City of tiny lights, solo		G						Vamp
267									
	57 YCDTOSA IV								See the first releases
269									
270	58 YCDTOSA V								See the first releases
271	Baked-bean boogie		Eb						Vamp
272	No waiting for the peanuts to dissolve		E						Vamp
273	The black page #2, solo				Bb				Pedal note
	Pound for a brown, solo		G						Vamp
275									
	59 YCDTOSA VI								See the first releases
277									
278	60 PLAYGROUND PSHYCHOTICS								See the first releases
	Brixtol still life					D			Pedal note
280									

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
281	61 AHEAD OF THEIR TIME								See the first releases
282									
283	62 THE YELLOW SHARK								
284									
285	63 CIVILIZATION PHAZE III								
286									
287	64 THE LOST EPISODES								
88	Lost in a whirlpool		E						Blues
289	Sharleena (1969), solo		G						Pedal note
290									
91	65 LÄTHER								See the original CDs
92	Duck duck goose, solo		D						Vamp
	Down in the dew, solo					D			Pedal note
94	Läther								See I promise not
95	Leather goods					D			Pedal note
96									
	66 FZ PLAYS THE MUSIC OF FZ								See the first releases
98									
99	67 HAVE I OFFENDED SOMEONE								See the original CDs
300									
301	68 THE MISTERY DISC								
02	Metal man has won his wings		E						Blues
03	Power trio		Α						Blues
304	Bossa Nova			G					Vamp (Latin style)
305	Speed-freak boogie		E						Vamp
	Mondo Hollywood		E						Vamp
07	Black beauty, solo		Eb						Pedal note
808									
309	69 EVERYTHING IS HEALING NICELY								
310	Roland's big event/Strat Vindaloo								Eastern type of scale
311									-

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
	70 FZ:OZ								See the first releases
313									
	71 HALLOWEEN								
315	Ancient armaments		Α						Pedal note
316									
	72 QUAUDIOPHILIAC								
318	Rollo, solo		E						Pedal note
319	Chunga's basement		D						Vamp
320	Venusian time bandits		G						Pedal note
321									
	73 JOE'S CORSAGE								See the first releases
323									
324	74 JOE'S DOMAGE								
325	Another whole melodic section								Chord progression
	Think it over		D				D		Pedal note
327									
328	75 JOE'S XMESAGE								
	GTR trio								See Power trio
330									
	76 IMAGINARY DISEASES								
332	Been to Kansas City		Α						Blues
333	DC Boogie		E			D			Pedal note/vamp
	Imaginary diseases		В						Vamp
	Montreal					D			Pedal note
336									
	77-78 MOFO								See the original CD
338									
	79 TRANCE-FUSION								
340	Chunga's revenge		D						Vamp
	Bowling on Charen					В			Pedal note/alternating chords
342	Good Lobna		F#						Pedal note

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
343	A cold dark matter				С				Alternating chords
344	Butter or cannons							Irregular	Irregular
345	Ask dr. Stupid		F#						Vamp
346	Scratch & sniff		G						Vamp
	Trance-fusion		D						Vamp
348	Gorgo		Α						Pedal note
349	Diplodocus		Eb						Vamp
350	Soul polka		C#						Vamp
351	For Giuseppe Franco					A			Pedal note
	After dinner smoker		Α						Pedal note
353	Light is all that matters, 1st block							Irregular	Vamp
	ldem, 2nd block				G				Pedal note
	Finding Higgs' Bosson					A			Pedal note
	Bavarian sunset	E				E			Pedal note
357									
358	80 BUFFALO								
359	The torture never stops (1980), solos		Α						Pedal note
360									
	81 THE DUB ROOM SPECIAL								See the first releases
362									
363	82 WAZ00								See the first releases
	Greggery Peccary								
365							E		Pedal note from 9:00 onwards
366									
	83 ONE SHOT DEAL								
	Heidelberg					E			Pedal note
	Occam's razor				С				Alternating chords
370									
371	84 JOE'S MENAGE								See the first releases
	Chunga's revenge (1975), solo		D						Pedal note
373									

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
374	85 LUMPY MONEY								See the original CDs
375									
376	86 PHILLY '76								See the first releases
377									
378	87 GREASY LOVE SONGS								See the original CD
379									
380	88 CONGRESS SHALL MAKE NO LAW								
381									
382	89 HAMMERSMITH ODEON								See the first releases
383	Flakes (1978), solo	E							Solo over a chord progression
	King Kong (1978), solo		Eb		D				Alternating chords
385									
	90 FEEDING THE MONKEYS AT MA MAISON								
387									
388	91 CARNEGIE HALL								See the first releases
389	Billy the mountain solos, guitar solo				C				Alternating chords
	Mudd shark, solo		E			E			Pedal note
391									
392	92 ROAD TAPES, VENUE #1								See the first releases
393									
	93 UNDERSTANDING AMERICA								See the original CDs
395									
396	94 FINER MOMENTS								
397	Sleazette		E						Pedal note
398	The old curiosity shoppe				C				Alternating chords
399	Uncle rhebus								See Baked-bean boogie
400	The subcutaneous peril		D						Pedal note
401									
	95 BABY SNAKES COMPLETE SOUNDTRACK								See the first releases
403									
404	96 ROAD TAPES, VENUE #2								See the first releases

2	T'41 -		D	D1			A 11		
40E	Title All skate			Pnrygian	Lydian	Mixolydian	Aeollan	Comment	
405		Α	Α			C/A			Blues
									0 " 5
	97 A TOKEN OF HIS EXTREME								See the first releases
408									
	98 JOE'S CAMOUFLAGE			_					See the first releases
410	Phyniox	Ab		С	Ab	Ab			Vamp
	Reeny ra							Locrian	Vamp
	Any downers?						F#		Alternating chords
413									
414	99 ROXY BY PROXY								See the first releases
415									
	100 DANCE ME THIS								
	Dance me this					F			Pedal note
418									
419	101 200 MOTELS, THE SUITES								See the first releases
420									
421	102 ROXY, THE MOVIE								See the first releases
422									
423	103 ROAD TAPES, VENUE #3								See the first releases
424									
425	104 THE CRUX OF THE BISCUIT								See the first releases
426									
427	105 FRANK ZAPPA FOR PRESIDENT								
428									
429	106 ZAPPATITE								See the first releases
430									
431	107 MEAT LIGHT								See the first releases
432	Whiskey wah		F#						Vamp
	The whip		Α						Pedal note
434	-								
435	108 CHICAGO '78								See the first releases

2	Title	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Comment	Туре
436	Twenty-one		С						Vamp
	Village of the sun, solo				F				Alternating chords
438	Paroxysmal splendor		E/A			A		Chromatic	Vamp/pedal note
439									
440	109 LITTLE DOTS								
441	Little dots #1, solo					D			Pedal note
442	Little dots #2, solo					G			Alternating chords
	Kansas city shuffle		G			G			Blues
	Columbia S.C., part 2		E				В		Vamp/pedal note
445									
446	110 HALLOWEEN 77								See the first releases
	Conehead instrumental					Bb			Vamp
448									
449	111 THE ROXY PERFORMANCES								See the first releases
450									
	112 ZAPPA IN NEW YORK DELUXE								See the first releases
452									
453	OTHER OFFICIAL MATERIAL								
	Walkin' out					D/A/E			Solo over a chord progression
455	Waltz (Pal records)		D			D			Jazz
	Breaktime		С						Jazz
457	Grunion run		С						Blues
458	Twinkle tits, guitar solos		E						Pedal note
	Conehead (1978), solo		F/E						Vamp
	Mo' mama					E			Pedal note/alternating chords
461	Improvisation in A					A			Pedal note
	Budapest solo					D			Pedal note

Types and scales	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian
- Solos over pedal notes	2	65	2	21	48	6
- Solos over vamps	7	31	4	5	16	4
- Solos over alternating chords	2	4		19	6	2
- Blues	1	11			4	1
- Others	3	7		1	5	1

There are two remarks by Zappa himself about the keys of his solos in Guitar Player, October 1995, pages 74-75:

- "And harmonically they're either pentatonic or poly-scale oriented. And there's the Mixolydian mode, which I use a lot".
- "I don't like chord changes. I like to have one tonal center that stays there, or possibly a second chord that varies off the main tonal center and then I play around that".

The first quote re-appears in the "Uncle light" CD liner notes, so I felt obliged to include some comment here. It looks like some miscommunication took place. Zappa can't be asked anymore and maybe the reporter didn't reproduce it literally in the correct context. First, these two remarks are inconsistent with each other. Poly-scale and one chord are opposites. Secondly, along the findings of this study, the following can be said:

- Pentatonic passages happen frequently, but they are always embedded in a diatonic environment. When you go a little beyond a passage, or listen to all parts, you can hear a full diatonic scale. See also the Burnt weeny sandwich section of this study. The "No waiting for the peanuts to dissolve" example is the only guitar solo example in this study, that's pentatonic for all parts over a longer period.
- Zappa did compose on his guitar (and sometimes directly on paper or at the piano). Many of his written compositions are poly-scale, but his solos only occasionally.
- Mixolydian is used a lot, next to Dorian and Lydian.

- The one chord remark corresponds best with the pedal note solos. In the implied meaning of one key, it fits more generally.

SHUT UP 'N PLAY YER GUITAR

1. Five-five-FIVE

All solos from what was originally record one of "Shut up 'n play yer guitar" have been transcribed in The FZ Guitar Book. "Five-five-FIVE" is not representative for Zappa's solos, using multiple scales. This "Shut up 'n play yer guitar" opening solo begins with an unusual chord progression in a 5/8 - 5/8 - 5/4 metre (hence its name). It's a progression of chords all using the open D and G string of the guitar as pedal notes, upon which the same chord type is played through keys that keep changing. The chord type is a 9th chord in the positioning fourth plus fourth plus major third. In the following note excerpt the first three bars are given in their complete form containing the first two 9th chords; next only the eight sequent 9th chords are given (all played in the same rhythm) plus the closing 5th chord.



Five-five-FIVE, opening bars. Source: Guitar book (transcr. Steve Vai).



Five-five-FIVE, opening chord progression (only the chords). Source: Guitar book.

The 9th chord is played subsequently on the lowest notes F, E flat, G, A, B flat, A, C, D, hereafter ending with a 5th chord on D flat. The structure is thus completely determined by positioning the 9th chord and using the D and G string. Traditional harmony is totally ignored: the chords following upon each other don't have notes in common and the D and G don't have to be in the same scale as the 9th chord. Even the positioning of the chords with the last 5th chord on D flat becomes chromatic.

Zappa in Guitar Player, October 1995:

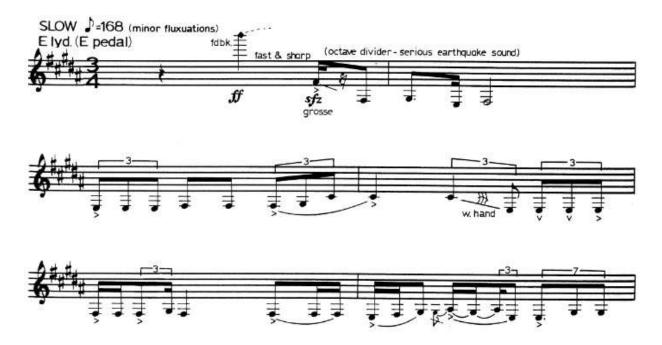
FZ: "It's in 5/8, 5/8, 5/4. You count it like this: One-two one-two-three, one-two one-two-three, one-and-two-and-three-and-four-and-five-and.

GP: "How would someone approach that without feeling as if they had two left feet?"

FZ: "It's a very guitar-oriented piece because of the way it uses the open string. So it's kind of an easy thing to pick-up on the guitar, in spite of the odd rhythm. As long as the numbers involved tend to frighten you, though, then the odd rhythms are not your meat. Don't worry about the numbers - you just have to worry about what the feel is. When I wrote that particular song I never even stopped to figure out what the time signature was. I don't worry about that when I'm playing the guitar. If I'm writing it for an orchestra, then I do. But I don't calculate how things that I make up on the guitar are going to look on paper or how it's ultimately going to be. I just play it and then figure out what it is later, after I've recorded it".

2. Hog heaven

A shorter solo in E Lydian, beginning with the picking on the lower guitar notes for about a minute. The bass guitar is giving a frequently recurring E as pedal note. It's transcribed in The FZ Guitar Book, pages 17-22. During the opening bars you can see how Steve tried to include guitar effects. The first note is a high feedback B, followed by a note indicated as "grosse" and sforzando. The sound gets described as using an "octave divider - serious earthquake sound". Zappa apparently sped up this track a bit for the album.



Opening from Hog heaven (FZ Guitar book, page 17).

In the Guitar Player interview with Steve Vai, February 1983 issue, Steve tells how he got hired to do this:

- GP: "So you we're taken aback by the complexity of Zappa's music."
- Steve: "I was just awed by it, and I tried to transcribe it. It took me months. [...] One thing led to another and I transcribed "The black page". I sent it to Frank and he wrote back, telling me that he liked it, and he offered me a job transcribing. I took it, of course: Frank was my favorite."
- GP: "How old were you then?"
- Steve: "I was 18 or 19 when I transcribed all the stuff that's in the book. I started transcribing then, and I just finished, right before the 1982 tour."

3. Shut up 'n play yer guitar

A solo in C Lydian, later on for a moment A Dorian. Transcribed in The FZ Guitar Book, pages 23-43. The accompanying chord scheme is I and II of C Lydian alternating, later on for a moment I and IV of A Dorian alternating. Zappa's solos could sometimes be individual pieces, but mostly they were part of songs. In this case the solo stems from "Inca roads" as included in the 1979 European winter tour. So you get a whole series of such C Lydian solos on tape, from which he would pick out the best. In this case Zappa was such pleased with the results that he would release five of them in total, four on this CD and one on "Guitar" ("System of edges").



Shut up 'n play ver guitar, bar 46. Source: The Frank Zappa Guitar book, page 27.

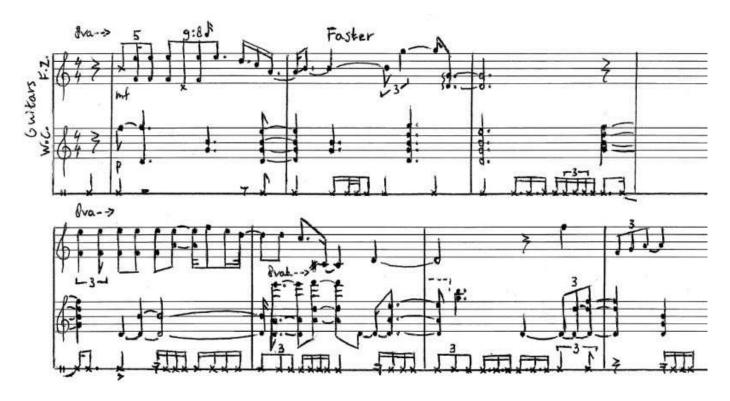


Shut up 'n play yer guitar, bar 54. Source: The Frank Zappa Guitar book, page 28.

Above are two bars from this solo with some examples of the difficult irregular groupings, which Steve Vai would use for transcribing. These two include tuplets within tuplets. See below at "Gee, I like your pants" and "The return of the Son of shut up 'n play yer guitar" for C Lydian solos with the I-II alternation from this set. Others from this study are "Holiday in Berlin", "Inca roads", "Orange county", "RDNZL", "Occam's razor", "Pick me, I'm clean" and "System of edges".

4. While you were out

The first of two solos with Zappa playing an acoustic guitar in the studio, accompanied by Warren Cucurullo on a 2nd acoustic guitar and Vinnie Colaiuta on drums. The key is sometimes D Mixolydian, sometimes D Dorian. The accompanying guitar frequently uses the bass string, tuned down from E to D, as pedal note for its chords. The meter of this solo isn't constant. There are even points where Steve Vai chose not to notate a meter division at all. Warren is picking out enlarged chords for the accompaniment, more common in jazz music than in rock. The transcription in The FZ Guitar Book, pages 44-69, contains both guitar parts plus the drum part. The Mixolydian F sharp and the Dorian F are both used. (I haven't checked this to the full, but there appear to be writing- or printing errors in the Guitar book. The F# during bars 94-6 is F natural and the F# on page 57 should be an E. Perhaps the Dorian element is stronger. This solo comes from a jam session from which also "Stucco homes" was taken. That one, and perhaps the session, has Mixolydian as starting point. Maybe the reason why Steve Vai also notates "While you were out" as in Mixolydian. The mingling of Mixolydian and Dorian is common in Zappa's music, however.)



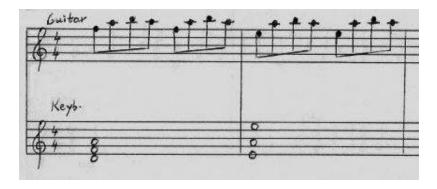
While you were out, opening bars. Transcription: KS/Steve Vai.

The example above contains the opening bars with Zappa playing the sharply dissonant major seventh in bars 1 and 4. The other bars are melodic. Warren Cucurullo plays softly in the background. At this point the solo is in D Dorian. Steve Vai transcribed this by rewinding tapes dozens of times, while I've got the facility of a computer. A simple mouseclick is enough for going back and you've got the computer indicating durations on the time axis mathematically. I'm getting at a somewhat different rhythm, but all remains an approximation, basically sounding the same as how Vai notated this. There are no clear downbeats or patterns here, like the I-II alternation in 4/4 from the previous track, which complicates the transcribing in this case.

I'm continuing with this composition in the Jazz from hell section. Zappa used the score of "While you were out" as the starting point for a new synclavier piece, called "While you were art II". The sound of this synclavier composition is totally different and the score got thoroughly re-arranged. Still it's possible to detect the notes from "While you were out".

5. Treacherous cretins

Here we get at a solo over a vamp, using multiple scales. In Guitar Player, October 1995, Zappa talked about a "harmonic climate" created by the vamp, implying D Minor and A.

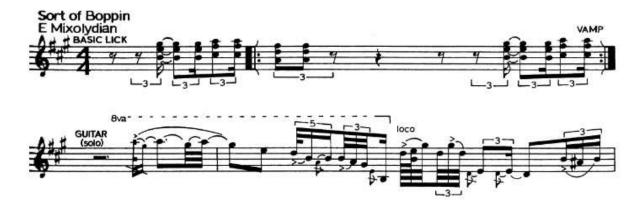


Treacherous cretins, vamp. Source: Guitar book. The chords are indicated as Dm and A, here positioned by me as keyboard chords.

The guitar vamp plus the keyboards chords at the beginning are thus being interpreted as I 5th of D Minor and I 5th of A with B being a passing through note. The solo is transcribed in The FZ Guitar Book, pages 70-78.

6. Heavy duty Judy

Another solo over a vamp, here in E Mixolydian. It's transcribed in The FZ Guitar Book, pages 79-89. The vamp does I-II-VII in E Mixolydian, while the bass gives an E pedal note. The sound of the guitar and some of its licks are remindful of the "Easy meat" solo from "Tinsel town rebellion", recorded about a week later at Santa Monica, December 1980. The vamp returns with variations and extensions as a concert opener on "The best band you've never heard before" (see the corresponding section for the "Heavy duty Judy" version from 1988).



Vamp and opening of Heavy duty Judy (1980) (FZ Guitar book, page 79). Since Zappa describes it as an E7 vamp, the first chord might also be played involving a D (B-D-E-G#).

In Guitar Player, October 1995, Zappa comments upon the fact that a bass pedal note or the key of a vamp doesn't prescribe a keynote for his solos:

- GP: "Heavy duty Judy" sounds as if it's based on more than one tonality.
- FZ: I do that all the time. For instance, that's just an E7 vamp, and I like to play in the key of A. It's just like playing in the tonality of the eleventh [extending E7 to A would create an 11th chord on E].
- GP: That can be pretty hairy for someone used to playing only major and minor chords and 7ths.
- FZ: They are missing out! The fun doesn't start until you get at the eleventh.
- GP: Further complicating the piece are the many different rhythms.

FZ: Well, basically, in that tune you've got the band - bass, keyboards and rhythm guitar - playing the same shuffle rhythm, and the guitar and drums are going apeshit on top of that, but always knowing where the downbeat is going back. That doesn't mean you have to play the downbeat, because everybody else is doing it - playing hemiolas across the bar.

7. Soup 'n old clothes



Soup 'n old clothes, opening. Transcription: KS (update fall 2017, deposited at the I-depot, The Hague). Note: these bars only roughly resemble the Guitar book, at a detail level I'm hearing most a little differently.

A solo in D Dorian. The bass guitar is giving D as pedal note. It's transcribed in The FZ Guitar Book on pages 90-106. Steve notates the meter as 4/4 with a 12/8 feel at the beginning, becoming normal 4/4 after some 15 bars. The rhythm section is indeed playing in 12/8 during the opening. To keep things consistent for my meters table from the Roxy section, the example below is notated in 12/8. But 4/4 with triplets is just as well possible. See also my discussion of "Lucille" from the Joe's garage section of this study.

"Soup 'n old clothes" begins gently with some sustained notes. In bar 5 Zappa accelerates to fast strings. Then it costs me an hour to transcribe a single bar, double-checking included. The whole piece takes up some 125 bars, most of them containing figures like in bar 5.

SHUT UP 'N PLAY YER GUITAR SOME MORE

1. Variations on the Carlos Santana secret chord progression

The vamp is I 7th and IV 5th alternating in G Dorian or a G minor and a C chord alternating if you wish. Zappa refers to it as "That ol' G Minor thing again" on "Guitar", where the vamp is used again. It may also be that Zappa considered Dorian a variant upon minor, as he would call the A Mixolydian solo from Prague (1991) simply a solo in A. Mixolydian then being a variant upon major. It's transcribed in The FZ Guitar Book, pages 108-117. The Trance-fusion section contains a fragment of two bars from this solo, while the Guitar section includes the vamp.

Steve on how he started the transcribing job (from the Guitar Player interview, mentioned above): "And I remember the first one I did that I was on salary was "Outside now". Then I did "He used to cut the grass". And this stuff was transcribed using a cassette recorder that was so small and weak and lousy. It was really hard. I used to sit and listen to one bar of music maybe a hundred times - hours and hours and hours of music. But it was fun: I enjoyed it. I felt *useful*. I was learning. I think that transcribing is one of the biggest learning experiences for a musician, and it's really good for a person."

2. Gee, I like your pants

The accompanying chord scheme is I and II of C Lydian alternating. The band played five gigs between January 17th and 19th at the Odeon Hammersmith in London, doing two times an early and a late show. This solo is a cut-out of one of the two "Inca roads" solos as explained above, played on January 18th. It's transcribed in The FZ Guitar Book on pages 118-123.





Gee, I like your pants, end. Transcription: KS (update Winter 2019, deposited at the I-depot, The Hague).

This solo can be roughly split into a few sections:

- 0:00 Regular C-D alternation in 4/4 with Zappa playing a melody.
- 0:16 Section with chords.
- 0:23 Block with ultrafast picking of notes (compare the Budapest solo from the Documentaries section of this study).
- 0:40 Melodic playing.
- 0:48 Larger block with chords, being variations upon a number of motifs.
- 2:08 Relatively slow melodic lines, ending with a sustained E note.
- 2:30 Spoken text as introduction to the next track (without a meter): "Identify your last ...".
- 2:35 End.

The example above is played between 1:52 and 2:31. It looks like Zappa has been editing the tape at this point:

- In bar 5 he's playing largely only by himself in a different tempo. In bar 6 the band continues in 4/4 as before.
- In bars 10-15 you've got a keyboard doubling Zappa's part with parallel fifths.

If this was a composed section that would be doable, but hardly in an improvised situation. There are also

many differences with the transcription by Steve Vai. Possibly Steve used an unedited tape. One may also notice that from bar 11 onwards the durations of the C and D pedal notes aren't equal anymore. Either Arthur Barrow sought for variation or this is a consequence of editing the tape.

3. Canarsie

A restless solo, played over a vamp that is alternating C sharp and E. The solo itself is chromatic, not using a specific key and using many dissonant intervals. "Canarsie" and "Ship ahoy" are the two solos from "Shut up 'n play yer guitar some more", that aren't transcribed in the Guitar book.



Canarsie, 0:00-0:07. Transcription: KS.

Both sections: update 2009, deposited at the I-depot, The Hague.



Canarsie, 0:54-1:04. Transcription: KS.

The basic tracks of "Canarsie" are taken from the 2/19/79 concert at the Odeon Hammersmith, London, with Arthur Barrow playing bass. There are some mysteries surrounding this solo. First the taped copies in the bootleg circuit apparently don't include this solo and no comparable ones from other concerts are reported. The bass overdub by Patrick O'hearn however, that replaces the original, gets confirmed in Greg Russo's book. The agenda of the Village Recorders studio in L.A. lists Patrick for May 11-12, 1979. Denny Walley plays a vamp on electric sitar. Secondly the exact rhythm of this solo is grueling. The pick-up bar consists of a drum intro lasting 7/8, followed by the first vamping figure of 5/16. Over this you get one of the many overdubbed comments that you can hear between the songs. The total vamp of two bars has two figures of unequal length alternating. The drum part is quite free. In the figures there is mostly an

equality between drummer, sitar and bass, so the one must have known what the other was doing. There are a few instances with the drummer ticking eighth or sixteenth notes. From these instances I get the impression that the meter is a 14/8 - 13/8 alternation, though I can't give any guarantees for the solo as a whole. I still have the idea that the solo might be resynchronized to a degree. The transcription contains two fragments including the drum beats.

4. Ship ahoy

This is the oldest solo on "Shut up 'n play yer guitar", stemming from the 1976 tour in Japan and Australia. Two variants can be found on the Zappa Family Trust releases "FZ plays FZ" and "FZ:OZ". In the seventies he sometimes experimented with aftersounds, like the echo on "Leather goods" from "Läther". Here there are higher and lower as well as more irregular resonating aftersounds. A section of "Ship ahoy" also got included on "Läther", following upon the "Little green rosetta" theme. See the Läther section for a transcription.

"Ship ahoy" is played over a straight sustained bass D-pedal, using D Dorian and D Mixolydian (both F and F sharp are used).

5. The deathless horsie



The deathless horsie (YCDTOSA), 0:43-1:08. Transcription: KS.

Both sections: 4th printable edition, 2012.



The deathless horsie (SUNPYG), section. Transcription: KS/Steve Vai.

This is a solo with a larger preset opening theme. It uses various scales. The modulation scheme is B Mixolydian, A Lydian, C sharp Minor/Dorian and back to B Mixolydian. The bass guitar is giving the sequent keynotes as pedal notes. These scales use the same set of notes, except for that during the C# pedal section both the A and A# sharp are used. Thus here minor (with the A) and Dorian (with an A#) are used as siblings. In the Guitar Book for the C# pedal part, pages 130-134, you'll only encounter an A. The second example below is using an A, but it looks like Steve Vai miswrote himself at some instances, that actually have an A# (something I noted when I checked things for my scales table from the Burnt weeny sandwich section).

The first example stems from the other available version of "The deathless horsie", the one that is included in "You can't do that on stage anymore, Vol I." (YCDTOSA) from the The Pier concerts, New York, 1984. The preset part lasts a minute in total and goes much identical to the "Shut up 'n' play yer guitar" (SUNPYG) version. The most notable differences in the set-up are:

- For SUNPYG the vamp is notated as two times 5/4. The YCDTOSA has to be notated differently, 6/4 plus 4/4, because of a more specific bass pattern. Here it's more like a vamp with the pedal notes as indicated below at their starting point at 0:17.
- On YCDTOSA the following order of the pedal notes is different, namely C# first and then A. The set-up on YCDTOSA is:
- 0:00 The vamp melody from staff 2 gets played twice.
- 0.08 The bass comes in with B pedal combined with a high keyboards B for the descant. This high B keeps being sustained all through the solo, the volume being less during the A pedal part. There's a little progression for the keyboards: II -I 7th I.
- 0:17 The bass begins playing the pattern: B-F#-D#-A with as duration lengths 3+3+2+2 (in quarter notes).
- 0:26 The solo begins with the main theme played twice. The transcription above contains the second instance (bars 1-8), followed by the improvised soloing (bars 9-11). The main theme isn't played 100 %

identical on all occasions, but with minor variations. It's made up of a little motif around B, played twice (bars 1-2), followed by a sequence of longer sustained chords (bars 3-8), at the end turning back to the I chord of B Mixolydian.

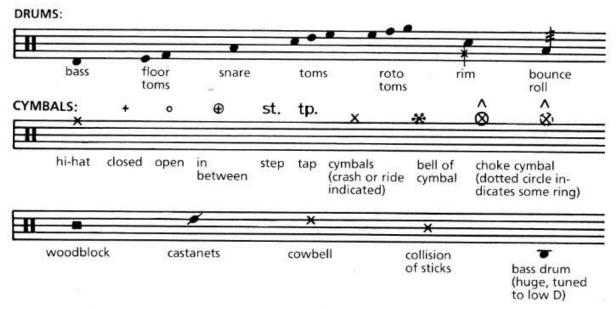
- 1:01 Improvised solo over B pedal.
- 1:36 Switch to C# pedal.
- 2:32 Switch to A pedal.
- 4:40 Return to B pedal with the main theme played twice again.
- 5:20 The vamp ends with being played by itself.
- 5:29 End of the track; the vamp segues into the "Dangerous kitchen".

6. Shut up 'n play your guitar some more

C Lydian as above. It's transcribed in The FZ Guitar Book, pages 136-152, this one including the drum part. The drumset notation is included in the book on page 8, next to specific guitar effect notations. It's the notation Zappa himself used for "The black page drum solo". To the right (on-line version) a sample from this piece (see the Zappa in New York section for more). It's also the notation I'm following in this study for the couple of instances where I've included the drum part.



Shut up 'n play your guitar some more, opening bars. Source: The Frank Zappa Guitar book, page 136.



Drumset notation as used in the The Frank Zappa Guitar book.

For most of his albums Zappa tried to create a sound specific for an album. This also goes for how the guitar sounds, especially for the three title tracks. Taken from subsequent gigs, these have an outspoken use of the stereo field, where also the intonation of sustained notes can move during their duration. Zappa produced all of his albums himself (only the first two were contractually attributed to Tom Wilson). He was quite fanatic as it comes to production techniques. It's a subject I have no technical knowledge of, so I can't effectively describe it, but it's something you can readily notice. Many Zappa albums sound perfectly produced. Sometimes there was no alternative but to accept lesser conditions, something Zappa dreaded. On this specific track you can occasionally hear the high feedback tones that live systems sometimes generate. Apparently this didn't really bother him.

7. Pink napkins

C sharp Minor (Aeolian)/Dorian and D Lydian. The bass guitar is alternating C sharp and D. It's the same pattern as in "Black napkins", described above. Zappa loved "Black napkins", playing it on the road for three sequent years from 1976 to 1978. See the FZ:OZ - FZ plays FZ section for more about "Black napkins". For this particular 1977 concert Zappa chose not to play the regular "Black napkins" opening theme, but to go straight ahead to the soloing over the progression. The meter is also different, namely 6/8 instead of 3/4, subdivided as two times 3/8. It's transcribed in The FZ Guitar Book, pages 153-158.



Pink napkins, opening. Source: Guitar book (transcr. Steve Vai), bass and some details I hear slightly different added by KS.

There's an ongoing indecision to play an A or A# over the C# pedal for the various occasions the C#/D schedule is used. In the examples in this study it goes as:

- Black napkins (1975): the A is avoided.
- Black napkins (1976): an A.
- Pink napkins: the A in bar 5 becomes A# in bar 7.
- Panty rap: the A is avoided again.

This continues in the 1988 version: A# for the chord at 0:39, A for the sax at 1:12-1:15 and 1:28-1:30, A# for the trumpet at 2:02-2:05 and an A again at 2:24-2:25.

THE RETURN OF THE SON OF SHUT UP 'N PLAY YER GUITAR

1. Beat it with your fist

A short solo in A Dorian over the bass playing an A pedal. All solos from "Shut up 'n play yer guitar" begin with snippets of conversations, used as brief transitory elements in between solos. For a few of the solos, the title was derived from the introductory dialogues, like in this case. Zappa had a pretty rich imagination as it comes to naming solos, literary styled rather than referring to the musical content and context.

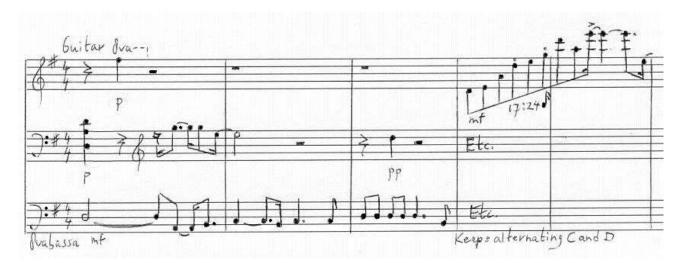
The FZ Guitar Book stops at the third "The return of the son of shut up 'n play yer guitar" album from the set, but it does contains nine other solos from "You are what you is", "Joe's garage", "Sheik Yerbouti" and "Zoot allures". Examples from the following titles are present in this study:

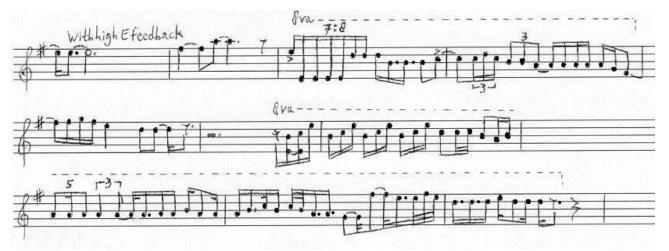
- "Theme from the 3rd movement of Sinister footwear" (Them or us section).
- "Watermelon in Easter hay" (Joe's garage section).
- "Sheik Yerbouti tango" (Roxy and elsewhere section).
- "Mo' mama" (Sheik Yerbouti section).
- "Black napkins" (FZ:OZ-FZ plays FZ section).

2. The return of the son of shut up 'n play yer guitar

Except for "Stucco Homes", the solos from the third "Return of the son of shut up 'n play yer guitar" album haven't been transcribed in the Guitar book, so here I can do some of the work.

This is the fourth and longest C Lydian solo included in this set. As it comes to irregular rhythmic groupings, you can hear a 17-tuplet going over a bar line in this example. I've also briefly notated how the I-II alternation is being played by the bass and keyboards.





Return of the son of Shut up 'n play yer guitar, 0:55 till 1:25. Transcription: KS (update 2006, 3rd printed edition 2007).

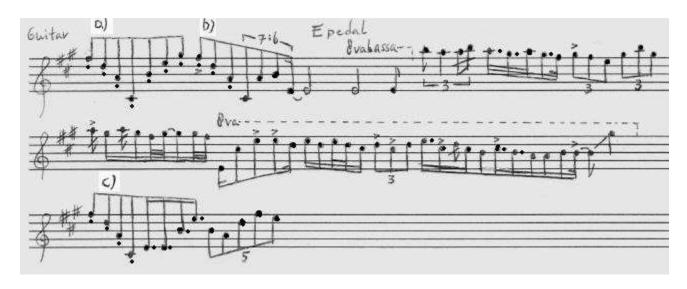
3. Pinocchio's furniture

The bass plays along D-A and D-G. The opening D note sets the key to D Dorian. The lower G would mean G Mixolydian, as I was saying in earlier versions of this study, but after relistening I think the D comes out stronger. For his three guitar solo sets Zappa is quite informative about the concert they were taken from, who's playing on it and even what type of guitar he was using. The Gibson Les Paul he mostly used can be seen on the album cover. Live solos are also included on many other Zappa albums, but normally without this sort of information. The vinyl albums had it printed on the back of the album sleeves. The CD has this in a booklet with a praising introduction by John Swenson, calling for instance "Pinocchio's furniture" brutally intense. It's a review, taken over form Guitar World, November 1981. The album box had a short introduction on the backside, probably written by Zappa himself. At that point he was talking about writers who forgot to listen what his guitar was talking about (not included on the CD). The set definitely helped to get Zappa better in the picture as a guitar player.

4. Why Johnny can't read

An agitated solo in E Mixolydian. The first minute Zappa is playing alone with only an E-pedal note coming up at the indicated point (and some harmonic fill-in in the background). After this minute the drummer joins in, but they never seem to get at a regular downbeat.

It's almost incredible that Zappa can keep this nerve-racking pace up for four minutes. The opening lick is an arpeggio figure picking on all seven notes of the scale once (figure a), so you get to the largest chord that's possible within a key, namely a 13th chord. This lick gets varied upon twice in my example (figures b and c). At points a and b the pedal E still has to come up. If you take the E as root it's I 13th for all three instances (with the third missing at points b and c).



Why Johnny can't read, opening. Transcription: KS (update 2006, 3rd printed edition 2007).

5. Stucco homes



Previous page: Stucco homes, bars 30-33 (FZ Guitar book, page 164). Staff one is FZ, staff 2 Warren Cucurullo and staff 3 Vinnie Colaiuta.

The second of the two solos with Zappa playing an acoustic guitar in the studio. It's the longest guitar solo from the set, lasting 9:08 minutes. It's transcribed in full by Steve Vai on pages 160-203 of the Guitar Book, taking up that many pages because it also involves a second guitar, with Steve having included the drum part as well.

The set-up is the same as in "While you were out" from above (both titles are from the same session). In this case the F/F# is about always F#. So the scale becomes D Mixolydian and the occasional F natural can be seen as an altered note. The Trance-fusion section from this study contains another small outtake of three bars from this solo at the quartertones paragraph.

6. Canard du jour







Canard du jour, 5:50-6:19. Transcription: KS (update fall 2017, deposited at the I-depot, The Hague).

Jean-Luc Ponty worked with Zappa from 1969 through 1973, but left the band in that year because he rather played jazz than the pieces Zappa had recorded for "Overnite sensation". Zappa wasn't amused, but also not vindictive, so here they are playing a duet without accompaniment. Zappa gave Jean-Luc equal space, crediting him as co-writer. So you get two personal styles mixed in this duet, giving it a special atmosphere. Jean-Luc can play softly, romantically, sustaining notes. Zappa is as good as always fast, an ongoing stream of rhythmic and harmonic combinations.

This is a studio recording too with little information about when and how it got recorded. My guess is that it is an edited version of sections from various takes, including overdubs. Zappa is playing bouzouki in "rhythm guitar" style, that is by playing series of chords. Ponty plays electric baritone violin. They take turns in coming up with motifs and themes, that can get being varied upon for minutes. At a couple of points the players are using their lower strings for giving pedal notes, other sections are floating as it comes to key notes. The piece opens with Zappa playing motifs over an A pedal by Ponty, the main scale being A Mixolydian. The section above is from a larger block in G minor/Aeolian. At first Ponty is evenly playing a G on his lowest string. From bar 11 onwards this switches to a I-VII alternation in G minor. The strong pedal note feeling of this block gets accentuated by Zappa, who keeps hitting the G and C strings of the bouzouki, probably open strings. One can see that he's mostly playing chords with the descending line Eb-Dm-Cm standing central. The tempo is very high, about as high as Zappa could play, complicating an accurate transcription. At 9:12 the coda starts with playing around a C-Ab chord alternation.

For further reading in this study about the guitar solos:

- Guitar: solo types.
- One shot deal: xenochrony.
- Trance-fusion: chromatic notes and quarter-tones.
- Sheik Yerbouti: solo building of Yo' Mama.
- Roxy and elsewhere: harmonies of the Orange County solo.
- Zoot allures: idem of the Zoot Allures solo.
- Quaudiophiliac: stylistic development.

YOU ARE WHAT YOU IS - THE DUB ROOM SPECIAL: ROCK 'N ROLL AND OTHER STYLES

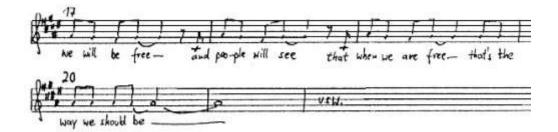
"You are what you is" (fall 1981) is a continuation upon the commercial success of "Sheik Yerbouti" and "Joe's garage, act I". Much of the album has to do with familiar chord progressions and stylistic conventions. All is done with productional craftsmanship regarding sound quality and vocal harmonies. It's pleasant listening to this music and especially the various extras that go beyond conventions indicate that there's someone with a high musical capacity behind this album.

Rock journalists seldom use note examples to clarify what the music they are writing about goes like. Rather they prefer to classify music by categorizing it into a wide range of styles and to tell who got influenced by whom. To call an artist "influential" has become the biggest cliché remark in rock writing. Many of these styles aren't styles in an abstract technical sense, but more groupings of similar sounding albums from a certain period. Some songs get mentioned as exemplary of a style. California pop means little more than sounding as Fleetwood Mac and grunge means little more than sounding as Nirvana. Zappa changed the sound of his music about every album and on each one new stylistic directions can be found. The transitions can be flabbergasting, like from "Lumpy gravy" to "Cruising with Ruben and the Jets" or from "Just another band from L.A." to "Waka/Jawaka". From the technical perspective, reviews about Zappa are often kind of weird as it comes to attempts to say something about his music, but it doesn't really matter. As the saying goes, as long as it gets reviewed it's ok, preferably positive. Zappa never aimed at one characteristic sound or a certain style. Instead of that, he kept doing whatever came up to him for all of his career, only kept together by what he himself called a "conceptual continuity". It's more an attitude towards music than a specific direction. How much has "Dance me this" drifted away from "Freak out!". This section mentions a couple of common styles you can encounter in Zappa's music, styles that have characteristics regarding their black dots (thus not only the sound). It's certainly not meant as complete, I'm just letting some passing by. To the right: part of a FZ photo by John Livzey as reproduced in the FZ Guitar book, page 204.

1. Teen-age wind

Like "Apostrophe (')", "You are what you is" begins with the sound of blowing winds, this time figuratively referring to the lyrics of the opening song. In the Neil Slaven biography, page 238, you can read how Zappa wrote "Teen-age wind" as reaction upon Arthur Barrow playing the Christopher Cross hit "Ride like the wind" to him.





Teen-age wind, opening (lead melody). Transcription: W. Ludwig.

The lead melody from theme one from "Teen-age wind" is present in the Ludwig study, pages 274-5. It's present in two shapes during this song:

- 0:00 Intro.
- 0:14 Theme one in 4/4. The theme is a bit ambiguous about its key. The lower bass note is G# while the main chord is F#. So it can be interpreted as G# Mixolydian or F# Lydian (the B from bars 5-7 should be a B#).
- 0:29 Theme one over a B pedal, the key thus switching to B Lydian by a transposition. This is happening at bar 13 in the example from above. As you can see the melody remains largely the same.
- 0:42 Repetition from the intro onwards.
- 1:22 Theme two.
- 1:45 Theme three.
- 1:57 Theme four/chorus in a couple of set-ups.
- 3:01 End.

Country

2. Harder than you husband

Former Mothers of Invention drummer Jimmy Carl Black made a guest appearance in a traditional country song "Harder than you husband" with hypocrite standard break-up lyrics ("it's better for you"). More complex country-based Zappa songs are for instance "Truck driver divorce" on "Them or us" (1984), and, regarding thematic variety, "Rhymin' man" on "Broadway the hard way" (1988). A section of the latter song is included in the Parodies section. Earlier examples are "Lonesome cowboy Burt" from "200 Motels" and "Poofters froth Wyoming plans ahead" from "Bongo fury". See the 200 Motels section for the opening bars from "Lonesome cowboy Burt".

The first example above is the refrain from this song. Bars 1-4 form a conventional harmonic pattern, I-IV-V-IV-V-I in C. With bars 5-8 Zappa evades to other scales. This second half of the refrain starts in Bb and gradually moves back to step V of C. This is done by first letting the Eb become natural again on beat 4 of bar 6 and finally the Bb also gets natural again in bar 8. Regarding scales the situation remains ambiguous however, because these two notes, that make the difference, are half of the time absent. Bars 5-8 can maybe better be interpreted as a chord progression unrelated to scales: Bb-F-Bb-F-Dm-F-C-G. The second example contains the end of this song. Zappa mostly lets his songs end in one of the following manners:

- End with one or more closing chords, in case of tonal music normally a harmonic cadence. This is the standard for classical music and pop bands playing life.
- End with, mostly, the main theme repeating and fading out. This has become the standard for pop songs recorded in the studio.
- End overnight at the end of a bar or a certain point in a bar and let the next song segue without any

pause.

- End overnight at an arbitrary point and let the next song segue without any pause.

The last two ways are uncommon, because they make a change sound rather abrupt (actually I only know of Zappa doing this, but that doesn't mean much). Though stylistically different, "Harder than you husband", "Doreen" and "Goblin girl" are musically interwoven in subtle manners. The classical ending of "Harder than you husband" would have been bar 2 from the second example. Here the songs comes at rest with the I chord from C, confirming the tonic. It gets followed, however, by two variations upon bar 5 from the previous example, that get repeated a few times. These two bars thus become the coda. What would be the final chord, or even the scale, remains undecided within "Harder than you husband". The E/Eb is absent during these variations, and two chords are dealt with as equal: Bb-F (I've notated it with Bb and Eb in the presets, because it's a variation upon the earlier bar 5 from the first example, where the Eb does occur). Zappa lets "Harder than you husband" end with a 3/8 bar and "Doreen" segues with the F chord. So, in a way of speaking, "Doreen" decides that F is the closing chord for "Harder than you husband". Harmonically the transition is thus taking place smoothly. Regarding style, "Doreen" is pretty different and there's also a tempo change.





Harder than your husband, refrain. Transcription: Kasper Sloots (update Winter 2015, deposited at the I-depot, The Hague).





Harder than your husband, end. Transcription: Kasper Sloots (update Winter 2015, deposited at the Idepot, The Hague).

Rock and roll

3. Doreen - Stevie's spanking - Tengo na minchia tanta

The opening of "Doreen" is pure conventionalism, for its lyrics and for its chord progression: I-IV-V. The example below is transcribed from the life version on "You can't do that on stage anymore, vol. V" (1992), where this song is played in E. What's less conventional is that the sung melody doesn't try to be a part of the chords, but is moving freely through it. It starts as:



Doreen, opening. Transcription: KS (update 2005, 3rd printed edition 2007).

"Stevie's spanking" from the "Dub room special"/"Them or us" is another example of regular rock 'n roll in 4/4. See below at "Beauty knows no pain" for an unconventional example of rock 'n roll. Or at "I come from nowhere" from the Drowning witch section of this study. It served as a vehicle for both Zappa and Steve Vai playing solos, either alone or simultaneously. Below are the opening bars from the "Dub room special" version with Steve "pounding" the chords of the main theme along with the rhythm guitar and the

keyboard, whereas Zappa is playing a few solo bars. It opens in A Mixolydian with in staves 2-4 a VII-I progression in bar 1 and VII-I-IV-II-I in bar 2. Bars 3-4 are alternating I and VII again. Staff 1 is moving freely over it, not necessarily following the pattern in the same way. Zappa begins playing with the C# altered to C natural over it in bars 5-6, then continuing with C# in bar 7. Thus in bars 5-6 he's briefly mingling the A Dorian scale by his solo with the A Mixolydian scale of the accompaniment.



Stevie's spanking, opening bars. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

In Guitar player, August 2006, Steve Vai comments about soloing with Frank Zappa during "Stevie's spanking": "When you are improvising with another musician, you get to enter a private place with that person and share an intimacy that you don't have in any other kind of relationship. For a 20-year old guitarist like myself, entering that space with Frank Zappa represented a very challenging process. At first I had to get over the fact that it was really happening. Then I'd be afraid to step on his toes, and I'd worry about things like "Am I in tune? Is he listening to what I'm doing? Does he think it's good, or am I crap." In a short while I got over that, and I just started jamming - hard. Then, that space became some sort of sanctuary. I learned how to listen and speak at the same time. It's about relaxing and spontaneously creating, and having fun doing it. I believe that's one of the things Frank was looking for. If it wasn't happening for him musically, he would have shut it down in a minute. But it turned into a special moment in the show."

"Tengo na minchia tanta" features the Italian reporter Massimo Bassoli. It was recorded for the final third round of the "Uncle meat" movie and included in the CD version of the corresponding album. The lyrics of this song are in Italian. One can look up a translation on the net, but the fun part of it is that both Zappa and Bassoli knew that the majority of listeners can't understand the lyrics. Its subdued sexual implications are meant to be tantamount to truly understanding it, underscored by some passages in English as "come on baby, suck my fire". Apparently it's not about the correct original way of preparing Spagetti Napolitana, but the need for a chicken to measure a large dick.





Tengo na minchia tanta, theme. Transcription: KS (update Winter 2018, deposited at the I-depot, The Hague).

Musically it's straightforward rock 'n roll in G minor with 4/4 as meter. The song knows two themes, that keep alternating each other. Both are included in the example above. Bars 1-4 are theme one, with a motif played in two slightly different shapes. The same goes for theme two (bars 5-8). While theme one is on beat, theme two comprehends a syncopic figure with 3-4-4-5 as subdivision. Bassoli is singing over it flatly, somewhere between normal singing and speech-wise singing, hitting upon altered notes and creating dissonances.

4-5. Goblin girls - Theme from the 3rd. movement of Sinister Footwear

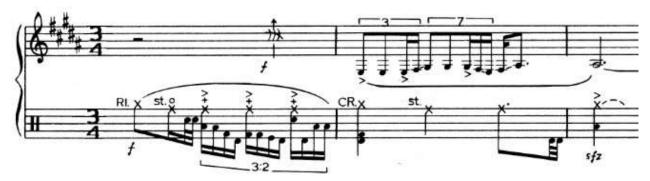
One of the extras on "You are what you is" is for instance how the melody of "Doreen" returns more slowly during the second half of "Goblin girls". It's sung over one of the "Goblin girls" themes vamping while a third voice joins in with horny fantasies about the girls in the green Goblin suits. This polyphonic writing style is quite rare in pop music.

An example from the "Theme from the 3rd. movement of Sinister Footwear" is dealt with in the Them or us section of this study. The whole solo is transcribed by Steve Vai in the Frank Zappa guitar book, pages 206-212. It's the only independent guitar solo from "You are what you is". The other larger ones are directly related to the songs they are part of for using a figure from the song as a vamp:

- Doreen solo: played over a vamping figure with lyrics. For some reason Zappa decided to mix the solo to the background.
- Dumb all over solo: again played over a vamping figure with lyrics. Now the solo is equal in volume compared to the vamp, forming a duet with it.
- Conehead and If only she would solo: solo over an instrumental figure vamping. This time the vamp is playing in the background, being closer to Zappa's regular way of soloing during a song.

 Overall, and compared to the other albums surrounding it, solos are less important on "You are what you

is". In the first place it's a vocal album.



Bars 4-5 from the "Theme from the 3rd. movement of Sinister Footwear" as transcribed by Steve Vai with the beginning of the guitar solo. This transcription includes the original drum part by Vinnie Colaiuta as recorded live ("Persona non grata" version). See the Them or us section for more.

6. Society pages

With these tracks a series begins about people from the society world, their obsession with beauty and abuse of drugs. "Society pages" could be called a rock song, specifically the second theme. It begins with an instrumental riff of four bars in 4/8, that is in the way I've notated it. It accompanies the main theme, being played really fast compared to the lyrics. It's in Bb Mixolydian, mingling the Bb and Ab chords.





Society pages, 0:00 till 0:20. Transcription: KS (update Summer 2018, deposited at the I-depot, The Hague).

The whole song is using four themes, stylistically quite different from each other, so the above is only one of its aspects. The themes are played as follows:

- 0:00 Main theme ("you're the ol' lady ...").
- 0:30 Second theme ("oh lady, oh lady ...").
- 0:42 Third theme ("the hospital plans ...").
- 0:58 Main theme ("somehow, ...").
- 1:50 Fourth theme ("some day ...").
- 2:01 Second theme.
- 2:11 Third theme ("by the grace ...").

7. I'm a beautiful guy

"I'm a beautiful guy" is a short collage-like song with a sequence of themes. Tracks 6-11 all directly segue, as are the lyrics flowing from one song into the next. It's written as a little story with episodes. Two more sequences of textually related songs can be found on "You are what you is" (see below). All three

are outspoken examples of Zappa's social criticism, as is the addendum to the CD booklet (formerly the album inner cover). It's an article, called "Say cheese ...", that got rejected by Newsweek for being too idiosyncratic. Above to the right its first paragraph in the lay-out from the original album. The text is also included in the CD booklet.

On page 108 of his study, W. Ludwig is pointing at the use of odd meters during tracks 7-9, probably being the reason why Zappa called this sequence hard to play on "YCDTOSA vol. III": "the "You are what you is" album has layer upon layer of over-dubs and many bizarre edits. The nightly challenge for the 1981 band was to replicate it - edits and all - on a live concert stage". Ludwig is for instance saying about "I'm a beautiful guy": "the introductory riff, played twice, is subdivided as an 11/8 bar (5/8 and 6/8) and a 9/8 bar (5/8 and 4/8)". Continued below at "Charlie's enormous mouth".

8. Beauty knows no pain



Beauty knows no pain, opening. Transcription: KS (the siren at the beginning moves in from the previous song). Update 2005, 3rd printed edition 2007.

"Beauty knows no pain" is complex rock 'n roll, using changing metres and scales. The odd 18/16 metre is a difficult figure, subdivided as 5+5+2+2+2+2. You can learn it by counting through it as one-two-three-four-five one-two one-two one-two one-two and then speed up the pace. Or listen

to how it sounds on record, get it in your recollection and reproduce it. The song starts in G Dorian. Bar 1 has the bass note going from Bb to G to C, leaving it in the middle what the key note might be. Only in bar 4, when the progression comes at a rest on G, a choice is made for G. Bar 8 is chromatic, containing a series of parallel minor thirds.

The 1981 Halloween concert was broadcast by MTV with the title "You are what you is" and sections are included in Zappa's "Dub room special" DVD as well. Recently the ZFT has made 10 of the 15 tracks from the "Dub room special" available on CD, with two tracks from the MTV show, whereas various other tracks from this concert - not on the DVD/CD - are included in the YCDTOSA series. A friend of mine was advertising Zappa at that time and at the age of 19 I watched the MTV concert. It made me decide to buy a Zappa record, "Drowning witch" it became. It was not the music, but Zappa's stage behaviour that made me try it out. Here was someone not shouting and dancing all the time, but sincerely performing music. His music never appealed to me at once and it took me more than a year to understand most of "Drowning witch". At first I thought the solos were album fillers, but at the time I got to buying "Shut up 'n play yer guitar", I was forced to listen more carefully. Well, as long as you can learn from your mistakes.

9. Charlie's enormous mouth

"Beauty knows no pain" segues into "Charlie's enormous mouth". This last song is very accessible mainstream music. That doesn't apply to the lyrics, that are kind of brutally formulated. It also doesn't go for the meters, of which Ludwig is saying: "The piano introduction, being blended with the end of "Beauty knows no pain", knows a 10/4 meter (4/4 plus 4/4 plus 2/4). After being played three times, a short break of two times 4/4 can be heard. The next 9/4 bar (5/4 plus 4/4) for the words "Charlie's enormous mouth" is yet another example of odd additive meters as a result of what's probably speech-influenced".

10-11. Any downers (1981) - Conehead



Any downers, sections (lead melody). Transcription: W. Ludwig.

An interesting earlier version of "Any downers (1975)" is included in the ZFT release "Joe's camouflage", featuring rehearsal recordings of a band that never came to be. The outro of this 1975 version of this song is included the FZ:OZ section of this study. The outlines of the "You are what you is" version of "Any downers" are sketched on page 229 of the Ludwig study:

- 0:00 Main chord progression in G minor, following Gm-Eb-Gm-F. The meter is 4/4 throughout.
- 0:09 Theme one ("And all around ..."), with this progression continuing.
- 0:26 Theme two ("But among the mourners ...") with a variation upon this progression.
- 0:34 Refrain ("Any downers ...") with the progression returning as played at the beginning.
- 0:52 Theme three/bridge ("No, I aint got anymore ..."), using a new progression, being Dm-C-Bb.
- 1:09 Little solo over the main chord progression.
- 1:25 Theme one ("The downers are gone ...").
- 1:42 Little intermediary phrase ("Now all you've got ...").
- 1:48 Variation upon theme one ("You turn it on ...").
- 2:07 End.

Compared to the 1975 draft version, this one is far more compact and complex, but the 1975 rendition also has its charm. An earlier live version of "Conehead" is described in the Baby snakes section of this study. Here you can find the main theme and an outtake from the guitar solo, as transcribed from the "Saarbrücken" bootleg from the "Beat the boots" series. Other than "Any downers", "Conehead" didn't significantly change over time. What you can see and hear in the Baby snakes section of this study is that in 1977 Zappa initially used the title "Conehead" for an instrumental, that has no connection with "Conehead" from "You are what you is".

Reggae

The previous Tinsel town rebellion section dealt with reggae. Though Zappa did not write outspoken reggae songs, the reggae rhythm occurs frequently in his eighties songs, like in the next song.

12. You are what you is

"You are what you is" is a rock song with a syncopic movement from the 2nd to the 3rd bar. Its theme is built around two alternating bass notes/chords along a fast reggae rhythm, at that time called ska. They can be seen as I-V of Bb Mixolydian when you take the first Bb as key note. When you consider the lower F of the second bar to be the key note it becomes IV-I of F Dorian (the instrumental opening ends on F, so it has something of a cadence).

The chorus is excellent poetry:
"Do you know who you are
You are what you is
And you is what you am
A cow don't make ham
You ain't what you're not
So see what you got
You are what you is
And that's all it is"



You are what you is, opening. Transcription: KS (update 2005, 3rd printed edition 2007).

Mainstream pop music

13-14. Mud club - The meek shall inherit nothing

"Mud club" has one theme, sung at the beginning and the end. In between you've got Zappa talking over a vamp with an electronically modified voice. "The meek shall inherit nothing" is accessible mainstream pop. This doesn't go for the lyrics. Together with "Dumb all over" and "Heavenly bank account", they form an effective criticism upon the negative side of religion. Especially "Dumb all over" is very well written, and audacious with Zappa using blasphemy to accentuate his argument.



Previous page: The meek shall inherit nothing, section. Transcription: KS (update 2013, deposited at the Idepot, The Hague).

The outlines of "The meek shall inherit nothing" go as:

- 0:00 Opening transition from the preceding "Mud club" track to the main theme from this song.
- 0:13 Main theme.
- 1:02 Second theme with Zappa speech-wise singing with electronically modified tones.
- 1:21 Third theme.
- 1:43 Main theme again.
- 2:07 Main theme in another rhythm.
- 2:32 Main theme in its first shape some more.
- 2:56 Outro transition to "Dumb all over".
- 3:10 End.

The example from above begins with the last three bars from theme three. It's an up going line from Ab to Db by the bass, with the other parts moving in a contrary direction. It ends with an instrumental bar in Db Mixolydian. The next four bars are the core of the main theme. They follow a chord progression, being Gb-Fb-Ebm-Gb. It's using Gb major and Gb Mixolydian next to each other. It's performed in a rather loose manner with a lot of improvisation to it. Three guitars and two keyboards are filling in the harmony. As usual in Zappa's arrangements, the vocalists don't sing identical notes, but are forming harmonies instead. The bass is playing around pedal notes in a free manner.

15. Dumb all over

The inclusion of tracks 14 through 16 got partly triggered by the popularity of some TV evangelists, that particularly irritated Zappa. "Dumb all over" is a rock piece with a rap sermon against religion in general. Like in "Mud club", he has his voice being electronically modified, this time also affecting the pitch. It's going up and down. Live this couldn't be done and a second theme got added to compensate for this. These live versions can be found on "YCDTOSA Vol. II" and "Have I offended someone?". The song ends with the chorus repeating the last sentence from the sermon as a vamp, over which Zappa is playing a solo. In Greg Russo's Cosmic Debris book it is said that Zappa edited out this solo on the CD issues. My CD is the one by Rykodisc with number RCD 10536. Indeed this track gets listed as lasting 4:03 minutes, which would mean the solo got skipped ... on some releases? When I'm playing it I'm actually getting this song with the full length of the original album, lasting 5:50 minutes. Luckily so, because it's a strong solo.

Gospel

16. Heavenly bank account

"Heavenly bank account" is his only attempt at gospel, following all the stereotypes of this genre. It opens with a "preacher" singing to the community with a choir and keyboard backing him up. The chord progression in rock terms is G-G-C-C#-5 -G-G-Em-Am-D (bars 1-16). The main part of the song starts in bar 18 with the central theme in G Lydian. Between these two blocks you've got Zappa talking in bar 17 without a meter.



Previous page: Heavenly bank account, opening. Transcription: KS (update 2008, deposited at the I-depot, The Hague).

"Heavenly bank account" is another example of Zappa adapting the speed of a song. It lasts 4:03 minutes on the original album, compared to the 3:44 minutes on CD. In this case the frequencies got right between keyboard frequencies, thus creating all quartertones. When you're listening to it normally that's no problem, but when you're transcribing it with the aid of a keyboard, that's really nasty. It's transposed a quartertone down in the transcription.

Blues

17. Suicide chump

"Suicide chump" is a song from "You are what you is", following the standard blues pattern. With this song the final third sequence from "You are what you is", this time more about people living at the self-side of society.

```
Metrum:
Grundrhythmus: [7 [7 [7 ] vsw.
Form:
               Vorspiel
               1.+2. Strophe (12-taktiges Bluesschema)
               Strophe
                             (erweitert zu 16 Takten)
               Gitarrensolo (12-taktiges Bluesschema)
               4. Strophe + Schluß (abgewandeltes Bluesschema: insge-
                            samt 32 Takte, mehrfach alterierte Akkorde)
Harmonik:
               Bluesschema:
               1.+2. Strophe: T - T - T - T -
                             5-5-T-T-
                             D - S - T - D
               3. Strophe:
                             T - T - T - T -
                             T - T - T - T -
                             S - S - T - T -
                             D - S - T - D
Melodik:
               Bluestonalität
Besonderheit:
               "Slide-Guitar"
```

Blues scheme from Suicide chump. Source: Wolfgang Ludwig, Untersuchungen zum musikalischen Schaffen von Frank Zappa, page 231.

The German chord symbols stand for: T (tonic) = I, S (subdominant) = IV, D (dominant) = V.

Ludwig depicts the blues scheme on page 231 of his study (reproduced above). Blues examples included in this study are for instance "Grunion run" and "Sexual harassment in the garage". See the Imaginary diseases section at "Been to Kansas City in A minor" for an overview of blues examples in this study, as well as the Bongo fury section at "200 Years old" for some more about blues.

Mainstream pop music (cntd.)

18. Jumbo go away

Most pop-music follows standard patterns, not specifically related to a certain style in a technical sense. It's using a rather limited number of chord types with the meter normally being 4/4, the reason why "new" albums mostly sound as if you already know them. These standards also occur frequently in Zappa's music, but they get mingled with a bewildering variety of non-standards. It makes the analysis of his songs interesting, even after some 400 examples. You still don't know for sure what the next one brings. "Jumbo go away", described beneath, knows normal chord progressions next to chromatic passages and an interlude, that's far away from pop standards.

The third sequence of songs with related subjects on "You are what you is" are tracks 17-20, this time about people who fail socially. It's part of the Zappa folklore that Moon Zappa entered her dad's business by writing him a letter about the idea of impersonating a Valley girl (included in the "Drowning witch" CD booklet). Actually she made her debut on "You are what you is" and probably Frank had asked her. She's the one doing the high vocals of Jumbo in the transcription below, like "feed me". "You are what you is" uses a wide range of singers, nine in total. As done more often, Zappa doesn't use the singers here to sing identical parts, but lets them sing in parallels and/or some devious lines. In the pick-up bar for instance you have four times a Db over the main melodic line, F-G-Ab-Bb. Next you've got staves 1 and 2 moving on via parallel thirds. In bar 11 you've a lead melody with the other singers forming two accompanying chords. Examples of the use of vocal parts in this way are numerous. The subject already came by in the examples sung by Flo and Eddie. Other examples in this study with creative ways of using vocal parts are for instance "Flakes" (2nd example), "I have been in you" (opening bars), "Doreen" (example above, bar 7), "Heavenly bank account" (opening with the gospel choir) and "The mammy nuns". The construction of "Jumbo go away" goes as follows:

- 0:00 Theme I with a I-II chord alternation in Eb Mixolydian. If you would take the G-Ab bass notes as leading it would lead to an obscurity, G Locrian, so I think most people would rather call it Mixolydian.
- 0:16 Theme II in Bb Dorian with the guitar chord progression I-IV-I-IV-III.
- 0:27 Theme I. The transcription below starts at 0:31 with this theme.
- 0:41 Theme II.
- 0:50 Chromatic passage with a constantly descending melody (bars 9-10 from the transcription).
- 0:55 Theme III in G Dorian with the guitar chord progression I-IV. The transcription ends here.
- 1:13 Theme III some more, now transposed up a minor second.
- 1:30 Instrumental interlude. A highly irregular section, not specifically related to the other parts of this song. This interlude used to be available via Barfo Swill.
- 2:20 Theme I.
- 2:35 Theme II.
- 2:47 Theme I.
- 3:01 Theme II.
- 3:10 Postlude ("wash up your pie"), making the transition to the next song as it comes to the lyrics.
- 3:43 End.





Jumbo go away, section. Transcription: KS (update 2013, deposited at the I-depot, The Hague).

19-20. If only she woulda - Drafted again





If only she woulda, 0:29 till 0:46. Transcription: KS (update Summer 2018, deposited at the I-depot, The Hague).

The central theme from "If only she woulda" is built around a keyboard chord progression: I 7th-IV-I-IV in B Dorian. The whole song is in 4/4. An instrumental interlude takes up about half of the piece:

- 0:00 Theme one (central theme).
- 0:39 Theme two. Partially chromatic progression, unrelated to a specific key: Bm-Bbaugm5-D-F#.
- 0:45 Theme one.
- 0:59 Keyboard solo over a I-IV alternation in B Dorian. The bass continues vamping as during theme one, while the chords are played in a somewhat different positioning.
- 1:28 Guitar solo.
- 3:00 Theme one.
- 3:30 Theme two.
- 3:37 Theme one.
- 3:48 End.

This song segues into "Drafted again". This track got released earlier as a single, carrying the title "I don't want to get drafted". This single version can be found on "The lost episodes". The "You are what you is" version is more phrenetic, with vocal parts by Ahmet and Moon. Below some more styles get mentioned, that you can encounter in Zappa's music. References are made to examples from other sections from this study.

Jazz.

Jazz gets amply dealt with in the Waka/Jawaka, The grand wazoo and Imaginary diseases sections, next to jazz-rock in the Hot rats section.

Lounge music

Lounge music can be seen as a form of easy-listening jazz, combined with pop-standards. "America drinks" from "Absolutely free" is included in this study. The "Chunga's basement" version of "Chunga's revenge" is dealt with in this study as well. One might call this more relaxed version lounge music too.

Atonal music

This is more a category of music than a style. The many examples of atonal music in this study are listed in the Burnt weeny sandwich section.

Serial music

This might be to a point be called a style within atonal music. Apart from a juvenile attempt (see the Zappa's teens section), it had no influence upon Zappa's music.

Doo-wop

The Ruben and the Jets section deals with Zappa's tribute to this style, popular in the fifties.

Waltzes

Examples of waltzes coming by in this study are "Sofa" and "Strictly genteel". The "Waltz for guitar" and the "Waltz" from the Cucamonga archive are called that way for their 3/4 meter, but for the remainder these two songs are stylistically untypical of waltzes.

Tangos and ballroom music

Zappa wrote two tangos during his lifetime. The Roxy and elsewhere section includes a subsection dedicated to his tangos. "Paroxysmal splendor" contains a section with ballroom music (see the Heidelberg section). "The tuna sandwich bolero" is a bolero with some liberty.

Disco

The occurrence of disco in Zappa's music remained limited to some influences that you could call discolike. See the Sheik Yerbouti section.

Rap

With "Trouble every day" Zappa wrote a song in 1965 that during the eighties retrospectively could be called rap. "Promiscuous" from "Broadway the hard way" is his only genuine rap song. See the corresponding section. It's the last time Zappa would react to a trendy style.

Ballads

Slow sentimental pop songs sometimes get referred to as ballads. "Lucille has messed my mind up" is an example from the Zappa catalogue. Rhythmically this song is also reggae, played very slowly.

World music

A term to cover non-Western styles of music. Some examples are present in Zappa's output. I'm dealing with this subject in the Documentaries section.

Folk music

Only marginally present. The subject is coming by in the Finer moments section at "You never know who your friends are".

Minimal music

Minimal music came up in the sixties, the idea being letting limited thematic material getting varied upon with only minor changes. The purpose is to create a meditative atmosphere, while some just find it boring. One might argue if not Erik Satie should be seen as a predecessor. It looks like Zappa wasn't interested in composing like that, but he did take a minimalistic approach to music in cases he wanted to let the lyrics or spoken text stand central. This subject is coming by in the Fillmore East and Thing-Fish sections, where you can find examples of vamps that are subservient to the text.

Collages

Like atonal music, this is more a category of music than a style. The subject is coming by in the Civilization phaze III and Dance me this sections.

Orchestral works, chamber music and modern rock (1982-1984)

In 1982 Zappa had acquired sufficient means to hire the London Symphony Orchestra to perform a number of his orchestral works. At the same time he got commissioned by the Ensemble Intercontemporain to write a chamber music piece for them. These recording were released as The L.S.O. and The perfect stranger, the latter with Pierre Boulez conducting. Other performances of orchestra and chamber music scores followed. Among them Sinister footwear, in full regrettably only available as sheet music (apart from a bootleg recording). During these years Zappa's modern music works could also appear on his rock albums. Ship arriving too late to save a drowning witch unintendedly contained a small U.S. hit with Valley girl. On Them or us one of the Sinister footwear movements can be found. On The man from Utopia Zappa experimented with recitatives.

SHIP ARRIVING TOO LATE TO SAVE A DROWNING WITCH: THE MODERN ROCK BAND

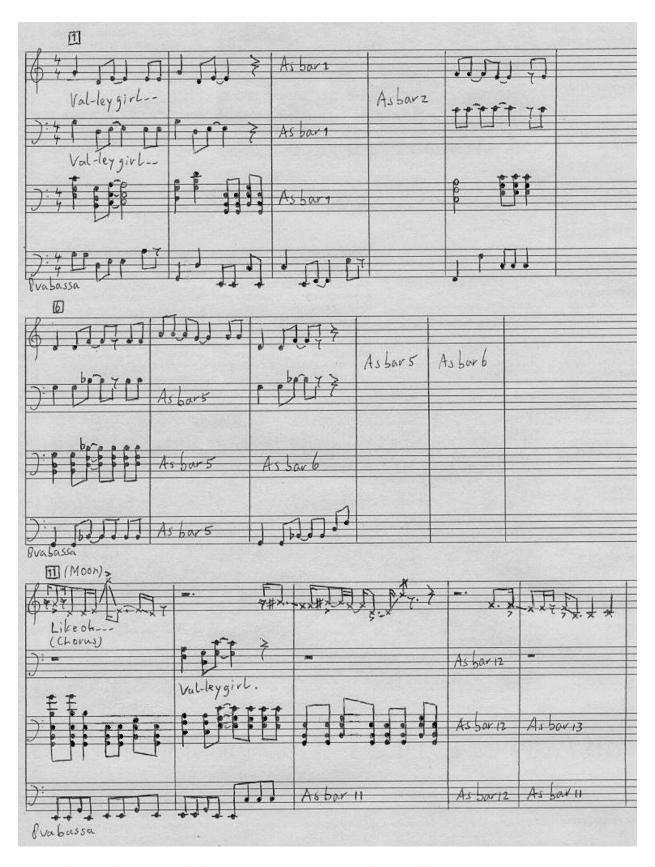
At the same time as Zappa was busy preparing the recording of his orchestral scores, he was more than ever behaving as the conductor of his rock band on tour, giving highstanding and technically impressive performances. Some of the orchestral pieces also found their way on the rock albums from this period, the "Drowning witch" album (1982) including "Envelopes", "You are what you is" and "Them or us" (1984) both including sections from "Sinister footwear". The latter composition hasn't been recorded yet in its orchestral form, but the scores are available at Barfko Swill. The subject of this section is continued in the Them or us section.

1. No not now

"Ship arriving too late to save a drowning witch" begins with two normal popsongs and then proceeds with an awe-inspiring combination of Zappa's composing skills and improvising capacities on guitar. Zappa would re-use "No not now" for his "Thing-Fish" opera from 1984. It has the same tracks with overdubbed spoken texts. In "Thing-Fish" the "No not now" track is included in combination with a version played backwards. The latter rendition has also the title written backwards: "Won ton on". Both songs are being dealt with in the Thing-Fish section of this study. Regarding its lyrics "No not now" got a sequel with "Truck driver divorce" from "Them or us".

2. Valley girl

Next are regular and unorthodox rock 'n roll, following upon each other on the album. The first is "Valley girl", a piece for which Zappa's daughter Moon suggested the lyrics. Frank took the bait. It has two short rock themes and a vamp, over which Moon is doing her Encino accent.



Valley girl, opening. Transcription: KS (update 2006, 3rd printed edition 2007).

Moon took an acetate to a radio station and it got that much attention, that it was released as a single shortly after. It climbed up to number 32 in the billboard top 40, Zappa's only serious U.S. hitsingle. It opens in C with the chord progression I-V-VI-V-III. Instead of giving a pedal note, the bass is part of these chords. In bar 5 the music changes to F major/Lydian with the progression F-C-G-Bb. Thus a progression of parallel major triads, causing the B to turn up as both natural and flat. From bar 11 onwards the bass does constitute a pedal note, with the key becoming E Phrygian. Here the accompaniment starts vamping around the chord progression I-II-VI.

In Guitar Player, February 1983, page 99, Zappa commented:

"Hits are not necessarily musical phenomenons. But as far as my feeling about it goes, I think if that amuses Americans, well, hey I'm an all-American boy. And I'm here to perform that function for you. Since that time, we've hired a guy to make merchandising deals about that song. And you wouldn't believe what kind of things will be coming out with the words "Valley girl" on them. You name it; everything from lunch boxes to cosmetics; including a talking Valley Girl doll in February."

3. I come from nowhere

On the album liner notes Steve Vai gets credited for the playing of "impossible guitar parts". Vai commented that Zappa would frequently come up with try-out scores to see if it was feasible for him to do things on guitar that Zappa himself thought were impossible. Zappa himself in Guitar Player, February 1983, confides to us: "What usually happens is this: if I put another guitarist on my album, I hire that person because he can play things that I can't play. And if the music requires a certain type of performance, and the composition is the real crux of the biscuit, then you don't want to be unfair to the composition and play it yourself if you're going to play it wrong. So I get people who can do it. It's not a matter of being lazy; if there's something on a given song that I think is in my department, I'm going to play it. But if it's something that will be difficult or impossible for me to do, I'd just as soon get somebody who feels comfortable with that style and have them do it." I can only take this for granted, I'm a lousy pianist and I can't play guitar at all. I can only transcribe deducing things - like apparently it goes as such or so -, but don't ask me to play it.

The other unconventional example of rock 'n roll is the opening of "I come from nowhere", rhythmically differentiated and using an accentuated dissonant G sharp plus A. Varying meters come along, normal 4/4 and some odd ones. The 27/16 bar is a fast pattern breaking atonal movement, possibly an "impossible one" for Steve Vai. The middle of the song contains an unusual chromatic melody formation, sung over counterpoint bass lines and an ongoing rhythm guitar. A strong guitar solo rounds of this piece. It's embarrassing to see that some of his own fans didn't follow him during this time. Dominique Chevalier concluded in "Viva Zappa" that "Ship arriving too late to save a drowning witch" was second rate and the 1982 Geneva concert, released on "You can't do that on stage anymore vol. V", was stopped just before its scheduled ending because of things being thrown on stage.





I come from nowhere, opening. Transcription: KS (update 2006, 3rd printed edition 2007). Note: the last bar should better have been notated with crotches.

The transcription covers the opening bars with:

- Bars 1-4: opening theme in F# Mixolydian, with the chord progression I-VII-I-II-IV in bars 1-2. Over the IV chord, held in bar 2, the dissonant notes G# plus A natural are played. The subsequent meters are 5/4, 4/4, 5/4 and 2/4. According to Zappa, Guitar Player, February 1983, page 99, this dissonant was created in the following manner:
- *GP*: "On "I come from nowhere" there's a strong dissonance, like a minor second clashing in the first few bars. Is that a guitar?"
- FZ: "That is a bunch of bass harmonies a half-step apart. He's [Arthur Barrow] playing what I think is a little three-part harmonic chord."

So noted. The G#-A dissonance dominates, but there may have been more to it.

- Bar 5: an atonal bar in 27/16. First it's a series of six 16th notes, next a sequence of lower thirds, half-way doubled with descant parallel notes. The movement comes at rest on the closing 5th chord.
- From bar 6 onwards the song becomes more normal rock 'n roll in B minor, mostly in 4/4, sometimes 2/4. Bars 6-7 form a chord progression, Bm-A#m-E-Db-D, at this point still being kind of chromatic. In bars 8-9 a two-bar vamp gets introduced, doing the chord sequence B-G-F#m7 in rock terms. Thus first two parallel major chords with the D altered to D# for the first one (it's a bit ambiguous about its key being B Mixolydian or minor).
- In bar 20 the sung main melody begins over the vamp from bars 8-9. It's strongly syncopic and with its D always being natural, it can be dissonant with the chords.

4. Ship arriving too late to save a drowning witch

The instrumental parts of the title track are an example of a composition made up of several motifs and variation parts, played in different tempi as in "Debra kadabra" from the Bongo fury section. Other than in the mostly unisono "Debra kadabra" track, the bass part in "Drowning witch" is frequently used for counterpoint movements. The general outline is that this song is made up of six blocks:

Block I, with lyrics:

- 0:00-0:38: The opening theme is a two-bars motif, freely improvising around a melodic line. This line is E-G-A in the first bar, followed by A-B-G in the second bar. The bass lick lasts one bar, giving an E pedal during beats 1-2, thus setting the key to E Dorian. On beats 3-4 you've got a syncopic movement. The bass goes up to varying notes and back to E via G. The theme is played instrumentally twice during bars 2-5 in the shape of a guitar chord series: I-III-IV, IV-I, I-III 7th-IV and IV-III-I. Bar 1 is a pick-up bar, with the

first chord probably stemming from the preceding song ("Drowning witch" is a compilation of various tracks, recorded live during the 1982 tour). As for the lyrics you can see that they are sometimes speech influenced, sometimes musical. In bar 6 the words "ship" and "late" are on beat, but the syllables from "ship arriving too" follow the exact rhythm of the spoken words. In bar 8 the opposite happens: "try", "keep", "date" and "with" are ticking evenly. Here this goes to the disadvantage of the spoken words: the syllables "-ing to" from "trying to keep" get oppressed to the point that they are hardly audible.



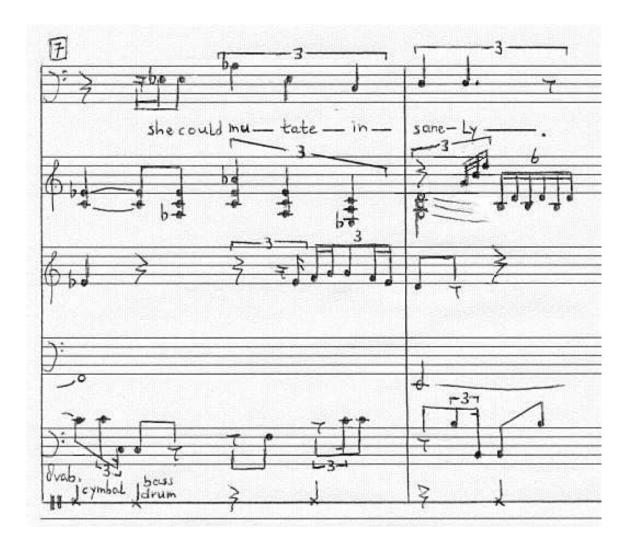


Drowning witch, opening bars. Transcription: KS (update Winter 2014, deposited at the I-depot, The Hague).

- 0:38-1:57. After the opening theme a through-composed block follows. It begins atonal and strongly speech-influenced. Not only the rhythm, but also the melody. See the next The man from Utopia section for more on this topic. The bass and keyboard are improvising along with Zappa. The meter remains 4/4 from the beginning of this song through bar 1 of the following example, with bass drum beats on beats 2 and 4. In bar 2 this gets interrupted for the first time with a 3/4 bar with toms on beat 3. The main drum beats are included in the example, otherwise the meter notation would become inunderstandable. In bars 5-8 you've got everything prescribed. The rhythm of bar 5 is remarkable: a 4/4 bar gets extended with one eight note to 9/8, this in combination with a sextuplet over seven eight notes. Next the music continues in 4/4 again. The main chord progression in bars 6-8 is Fmaj7-Ab-G, making it sound diatonic again after a number of atonal bars.







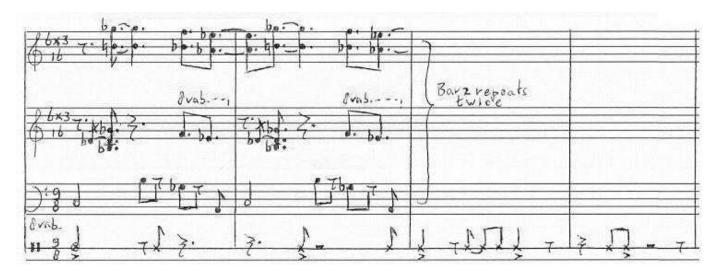
Drowning witch, 0:41 till 0:59. Transcription: KS (update Winter 2014, deposited at the I-depot, The Hague).

Block II, instrumentally:

1:57-3:12. This is the larger instrumental block from this song. It's a series of smaller themes and motifs. Next are three examples from this section. It's abstract atonal music. With its smaller time units, the third example is being played in a thrilling high tempo, especially when the 16th notes occur. The first example deals with playing around the Ab note, varying the rhythm within a 9/4 meter. The third one contains various forms of sequences in bars 1-8, to end with deliberate irregular strings in bars 9-11. Combined with the high tempo and abstractness of the string in bar 9, it's almost as if the band is firing notes at you with a machine gun.



Drowning witch, 2:30 till 2:38. Transcription: KS (2nd printed edition, 2001).



Drowning witch, 2:38 till 2:44. Transcription: KS/Elmar Luksch (update Winter 2014, deposited at the I-depot, The Hague).

In the booklet for "YCDTOSA vol. III" a second version of "Drowning witch" got included. Zappa comments: "This a hard song to play. How hard? The 1984 band never played it correctly during the 6-months tour, and the 1982 band only managed to get close on *one* occasion. This edit collates the best efforts of both groups."



Drowning witch, 2:47 till 3:03. Transcription: KS (2nd printed edition, 2001). (Barfko Swill sells or used to sell individual parts from the Drowning witch interlude, probably including these sections. I ordered two of them, but apparently something went wrong, so I transcribed it from record in order not to hold up the study. You could use them yourself to fill in the unclear notes between brackets).

The difficulties of the song are getting clear from the examples above. You have complex rhythmical figures as the sextuplet within a 9/8 meter and the section between 2:38 and 2:44. As noted by Elmar Luksch (see the links) it contains a 9/8 bass figure, played as 4/4 extended with one eighth note. Over this a lead melody is played, that subdivides the 9/8 meter into 6, thus becoming six beats lasting 3/16 each. The lead melody is also syncopically bound with the previous bar, so the effect you're getting is that the lead melody seems to float over the bass figure without having a direct relationship with it. Only at one point per bar the bass and lead melody are equal. The upper lead melody is played in the shape of three descending parallel fifths, in dissonance with the bass and middle part. Next you've got the mingling of tonal and atonal music in this song, tempo changes and very fast episodes. The irregular strings must have needed time to memorize. At a detail level the "Drowning witch" and "YCDTOSA vol. III" versions differ in many aspects, so even for a complex song like this, Zappa stuck to his habit of changing songs during tours. The metronome tempos of a fourth note in the examples used in this section are:

- Opening bars: 105.
- 0:41 till 0:59: 105.
- 2:30 till 2:38: 135.
- 2:38 till 2:44: 200.
- 2:47 till 3:03: 165.
- 4:40 till 4:52: 100.
- 11:07 till 11:17: 130.

The 1982 album version is a highly edited compilation of tracks from the 1982 tour from a number of concerts. Zappa comments in Guitar Player, February 1983: "Do you know how many edits there are in "Drowning witch"? Fifteen! That song is a basic track from 15 different cities. And some of the edits are like two bars long. And they are written parts - all that fast stuff. It was very difficult for all the guys to play that correctly. Every once in a while, somebody would hit the jackpot, but it's a very hard song to play. So there was not one perfect performance from any city. What I did is go through a whole tour's worth of tape and listen to every version of it and grab every section that was reasonably correct, put together a basic track, and then [I] added the rest of the orchestration to it in the studio."

Block III, first guitar solo:

3:12-6:45. This is a relatively unusual solo. The meter is 9/8 (subdivided as 2+2+2+3) and there's a lot of ambiguity about the tonic and scale used. The bass vamp has F and A competing as pedal notes. During the intro it's played as the descending line F-F-E-D-A, setting the accent on F. When the soloing starts, the opening F is replaced by a pause on the downbeat, so it sounds like the first beat becomes syncopically bound with the A from the previous bar. So the A starts to function as tonic, more than the F. Towards the end the F returns as opening note. As it comes to the scale a lot of chromaticism is going on. The mostly used series are:

- A-B-C-D-E-F-G#: A minor (the common variant with a major 7th).
- A-B-C#-D-E-F-G# and A-Bb-C-D-E-F-G#: self-created scales, sort of Gypsy type scales with F-G# as an augmented second in it.

In the example below you have A-A# (Bb), G-G# and C-C# next to each other, showing the degree of chromaticism in this solo. In the background harmony by the keyboards you always have a G# and the notes mostly used by the keyboard are the ones from the E7 chord, often as arpeggios. The example begins with a dissonant feedback chord, howling softly.



Drowning witch, 4:40 till 4:52. Transcription: KS (update Winter 2014, deposited at the I-depot, The Hague).

Block IV, instrumental interlude:

6:46-7:14. A relatively short block, made up three smaller themes. The first is a melody over a chord progression, the second a string of unisono 16th notes. The third is a guitar melody over an F# pedal.

Block V, second guitar solo:

7:14-11:06. Other than the first above, this one is more like a regular Zappa solo. It's stable in B Dorian and the meter is 12/8.



Drowning witch, 7:14-7:35. Transcription: KS (update Fall 2019, deposited at the I-depot, The Hague).

The example above contains the first four bars. In this study I'm using the transcriptions 1:1 to create midi files on-line. In this case I had to use three staves for the guitar part. The first represents the normal lead melody, the second less audible harmony notes and feedback and the third one scratched notes, lightly audible in the background. Arpeggios, also the harmonic fill-in, are written out with their pace. This may look a little odd on paper, but in this case I really need things like this to let the midi file at least approach how it sounds on record.

Block VI, instrumental outro:

11:07-12:03. The following is a section from the outro. It's part of block with a chord sequence in a plain 3/4 waltz rhythm. The bars begin with one beat with quarter notes evenly held, followed by two lightly staccato beats. The bass is giving an F# pedal note and puts his own accents elsewhere occasionally, as on beat two in bar 3. The notes of the chords are played by different instruments, spread out over the stereo field. For the chords Zappa is mingling three appearances of the minor type scale:

- F#-G#-A-B-C#-D-E: F# minor (Aeolian).
- F#-G#-A-B-C#-D-E#: F# minor (the standard variant with a major 7th).
- F#-G#-A-B-C#-D#-E: F# Dorian.



Previous page: Drowning witch, 11:07 till 11:17. Transcription: KS (main chords mostly as indicated by Elmar Luksch). Update Winter 2014, deposited at the I-depot, The Hague.

Over the F# pedal note, the chord progression in the example is:

- bar 1: E-A-E.
- bar 2: C#-Bsus2-F#m.
- bar 3: F#sus2-C#-Aaugm.
- bar 4: A-E-F#m.
- bar 5: Dmaj7-B-B.
- bar 6: C#-F#m-F#m.

If you would continue you would also get at a chromatic sequence in bar 13:

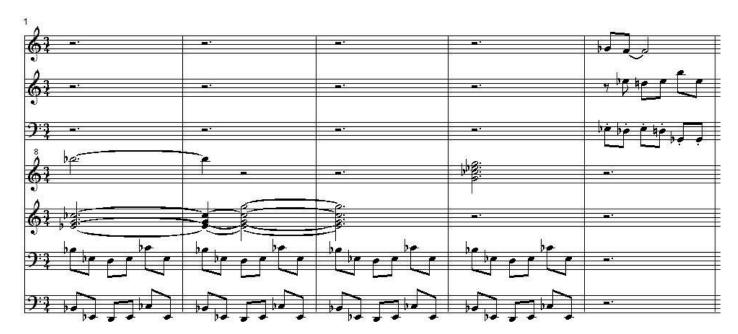
- bar 13: F#m-F-Asus2.

On the F chord the F and C once appear as natural in this section. Of the series F#m-F-Asus2, the A they have in common is held as the upper note and you've got a chromatically descending fourth for the other two notes of the chords: C#+F#=>C+F=>B+E. In the next bar there's no such pattern. The transitions are kept fluid because about all chords have notes in common with the previous chord, which is the norm for traditional harmony. Thus Zappa can do it this way, but he can also bluntly jump from one chord from one scale to another chord from another scale without binding notes, like in "Uncle Meat" or "Would you like a snack".

- bar 14: B-D-C#.

5. Envelopes (1982)

This is the rock-band version of "Envelopes (1983)", a modern atonal piece that was also orchestrated for the L.S.O. recordings. The L.S.O. section from this study contains an example from this composition in its orchestral form, reduced in the sense that I left out the instrumentation. There are many differences between these two versions. The original version on the ZFT release "Odeon Hammersmith" goes different as well. At that point this composition had lyrics.





Envelopes (1982), section. Transcribers:

- W. Ludwig: lead melody (see below).
- KS: everything else (update Fall 2019, deposited at the I-depot, The Hague).



The opening of the 1982 version begins with a figure played four times. It's being accompanied by Eb augm. (plus a high dissonant Bb at the beginning). Ludwig is notating some bars from this opening as diatonic, probably because of this theme returning later on in a different shape. At this point there are that many notes altering that I consider about all of it atonal. Only the repeated opening bar might be attributed to Eb minor, the variant with the augmented 7th (D natural). Once the melody of its main theme starts, Zappa is consistently applying counterpoint, up to four-part counterpoint. It's kind of irregular, though repetitions of figures and similarities of motifs and their directions can be detected.

6. Teen-age prostitute

In January 2016 I was invited by Jos Zwaanenburg of the Amsterdam Conservatory to listen to a smaller Zappa concert during their open house (January 23th). On the program were among others "The Black Page" and "Teen-age prostitute", so I proposed to include an example from the sheet music they used for the latter song. "Teen-age prostitute" doesn't have real themes. Rather it is made up of a series of phrases:

- 0:00 Intro with the guitars and bass hammering on the E. *Block with lyrics*
- 0:05 Phrase 1 (She's only seventeen ...), played three times.

- 0:12 Phrase 2 (She's a teen-age prostitute).

Instrumental block

- 0:14 Phrase 3.
- 0:19 Phrase 4.
- 0:21 Phrase 5.
- 0:29 Phrase 6, played twice.

Block with lyrics returns

- 0:39 Phrase 1 (She ran away from home ...).
- 0:46 Phrase 2.

Instrumental block returns

- 0:49 Phrase 3.
- 0:53 Phrase 4.
- 0:55 Phrase 5.
- 1:02 Phrase 6, played twice.

Second block with lyrics

- 1:12 Phrase 7 (I have got a pimp ...).







Teen-age prostitute, section. Transcribers:

- Jos Zwaanenburg. See below. This is a re-arrangement for a jazz combo, done with some liberty. The clarinet notation is for a Bb clarinet. The meter at bar 42 is 4/4.
- Kasper Sloots. Literal rendition of the Drowning Witch execution. Update Spring 2016, deposited at the I-depot, The Hague.







First block with lyrics returns instrumentally, followed by another return of the instrumental block.

- 1:27 Phrase 1. The example above starts with the third repetition at 1:32. The meter is standard 4/4 and most of the rhythm in this song is regular. The scales on the other hand are only implied with altered/chromatic notes turning up all the time. It's one of the many examples I'm calling multi-scale in the Burnt weeny sandwich section, with many scales getting touched upon only briefly. In bar 1 of the example (the fourth bar of the phrase) the implied scale is C Mixolydian.
- 1:35 Phrase 2. The music is diatonic, but the bass is moving too much to confirm a tonic.
- 1:38 Phrase 3. Bar 3 in 3/4 is chromatic. Bar 4 is in 4/4 again, with the implied scales being C# Locrian during beats 1 and 2, and C Lydian during beats 3 and 4.
- 1:42 Phrase 4. An ultrafast descending chromatic line in 6/8. It turns up three times during this composition with the details being different, so it's probably improvised along the idea of six times four 32nd notes and six eighth notes for the bass.
- 1:44 Phrase 5. The music returns to 4/4 again. The bass part features a descending chromatic line. In following order:
- 1) Bass G# with the F#m chord, implying G# Locrian or Phrygian.
- 2) Bass G natural with the F#m7 chord, implying G Lydian.
- 3) Bass G natural with the Ab chord, implying G Phrygian.
- 4) Bass F# with the Ab chord continuing. This is transitional with the combination not being a standard diatonic scale.
- 5) Bass F# with the G chord, implying F# Locrian or Phrygian.
- 6) Bass F natural with the G chord continuing, implying F Lydian.
- 1:51 Phrase 6. Rock music in E Locrian as the best fitting scale for the whole. Altered notes can turn up. The keyboards are playing an upwards parallel movement of fourths, always before beat. The example above stops at 1:57.

First block with lyrics returns for the last time

- 2:01 Phrase 1 (The tiny little pants ...).
- 2:08 Coda.
- 2:19 Applause, fading out. At this point it comes out the best that various tracks were recorded live. At a few other instances the audience can be heard lightly in the background.
- 2:40 End.