

Tempo Mental Rap

for guitar

Michael Edward Edgerton

Dedicated to and written for
Stefan Östersjö

Notes

Tempo Mental Rap, for solo guitar is a series of 6 variations based upon a rap (spoken phrases) performed by Frank Zappa that was transcribed by the guitarist Steve Vai. The original melody has been re-notated by myself and can be seen on pages 5 and 6. For musical purposes I changed some of the notation and because of the poor visual quality some of the text was not legible, which I notated with question marks. In addition, as this is not intended to faithfully reproduce the Zappa performance I left out other details of articulation and performance that Mr. Vai indicated, as my purpose was to base the variations primarily on the rhythmic structure and less so on pitch or the other variables.








In the performance of my composition *Tempo Mental Rap* the original melody may be performed or not – this depends on the desires of the performer. IF the guitarist decides to play the original melody, then this should precede the performance of the variations proper. Further, IF the guitarist decides to perform the original melody, then he or she may choose one of the following: play the melody on the guitar alone; sing the melody alone; or sing and play the melody together. If deciding to use the voice, the performer will have to fill in text or vocables in the spaces in which the question marks appear.

PRELIMINARIES

<p><u>Left-Hand</u> Thumb - Index - 1 Middle - 2 Ring - 3 Little - 4</p>		<p><u>Right-Hand</u> Thumb - p Index - i Middle - m Ring - a Little - e</p>	<p><u>String-Fret</u> ⑥ XV = String 6; Fret 15:</p>
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
From Bernhard Siegfried Albinus: *Tabulae sceleti et musculorum corporis humani* ** (see below)



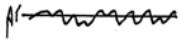



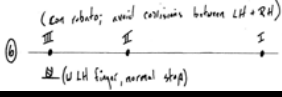
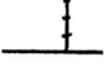





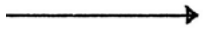

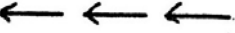


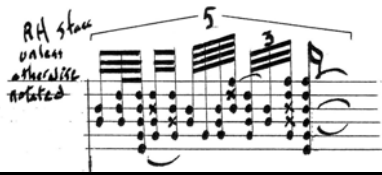

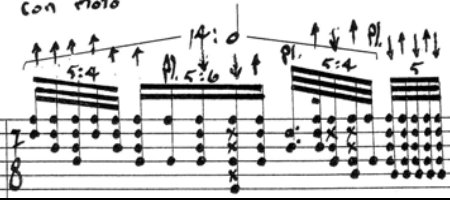
SURFACE OF SOURCE ARTICULATION

	<p>Fingertip</p>		<p>Fingernail</p>		<p>Side of finger</p>		<p>Underside of finger</p>		<p>Knife edge @ e</p>		<p>Knife edge @ i/p</p>		<p>Two fingertips (side by side)</p>	<p>Back of finger</p>	<p>Palm</p>
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MANNER OF SOURCE/FILTER

The manner of the source and filter are identified by symbols (see directly below) and at other times on a six-line staff (see page 5). The idea of placing pluck/strum information on a six-line staff is to decouple the left-hand from the right-hand




	<p>snap pizzicato</p>	<p>K (koto pizz.)</p>	<p>Koto pizzicato (similar to a Bartók pizz., but the string is gripped next to the left hand)</p>	<p>ord</p>	<p>over sound hole</p>		<p>rapid oscillation parallel to string</p>		<p>rapid oscillation perpendicular to string (in this specific example, the oscillation occurs across string #4)</p>		<p>twist with nail</p>
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	twist back and forth		abrupt onset		vary pressure of variable as indicated
	vary between all 4 states in random order (var 5)		with sponge (var 5)		abrupt stop with accent (var 5)
	normal stop/fingering with left or right hand finger (var 5)		ord (for height) only a little string rise to no string rise (var 5)		squeeze pad covering string, directly over string (var 5)
	back + forth motion, small width; approximately 1 fret (var 5)		pad depressed so it hits fingerboard, with only transient upward pressure on string (var 5)		back + forth motion, med width; approximately 3-4 frets (var 5)
	movement, R to L (var 5)		movement L to R (var 5)		back and forth motion, large width; approximately 8-10 frets (var 5)
	multiple start/stops from L to R (var 5)		lift string with sponge, small (var 5)		lift string with sponge, medium (var 5)
	The six-line stave identifies the strings of the 6-string guitar as identified to the right. The tunings often use scordatura, which are indicated in the respective variation. The idea is to decouple the left-hand from the right-hand in order to generate an acoustic and performative difference from coupled performance practice.	The x-marking on the stem ONLY during the strum/pluck notation refers to the damping of the string that is indicated. (remember that the x-mark on the stem of the normal left/hand notation refers to left-hand placement on the fret			lift string with sponge, high (var 5)
	Arrows pointing down indicate a downward moving strum, while arrows pointing up indicate an upward moving strum Pl. indicates to pluck, rather than strum (for example in the 2 nd variation				





















PLACEMENT OF SOURCE PRODUCTION

	1. on a four line staff, in which the pluck/strum location is spatially scaled to encompass two ponticello regions (potentially crossing below the bridge) to regions next to left- (or right-) hand stops, or crossing over the stop location to play to the left of the stop (or potentially above the nut) – the idea is to develop scales (continua) of place rather than discrete points
⑥ IX	2. the precise location is identified by string, 6 and fret IX
ord	3. the general location over or near the sound hole

MANNER OF ARTICULATION (LEFT OR RIGHT HAND)

	On fret
	On two frets
	The two-line staff identifies effleure, or depth of depression of left- (or right-) hand depression

MANNER OF ONSET/OFFSET

ONSET	PARTICULARLY FOR VARIATION 3 (4 AND 6)	OFFSET	ONSET	PARTICULARLY FOR VARIATION 3 (4 AND 6)	OFFSET
	to/from right, slightly up			to/from right, slightly down	
	to/from left, slightly up			to/from left, slightly down	
	to/from straight up			to/from string 1 to string 6 (up)	
	to/from string 6 to string 1 (down)			to/from, direction 6 to 1, striking adjacent strings as specified	
	to/from, direction 1 to 6, striking adjacent strings as specified			silent on or off	

SPECIFIC INDICATIONS

- Variation 1, page 1
- *1. Both soprano and alto voices feature ‘broken triplets’ - meaning a triplet figure that is broken up by the insertion of other material in between the separated parts – in this specific case for both soprano and alto, the first two divisions of a triplet are separated from the third division of a triplet by two pulses. The effect of this notation is to offset the values in between the divided triplet by 2/3 of a pulse. This notation occurs throughout the six variations and stems directly from the Vai transcription.
 - *2. On the 6-line stave occurring on the first full pulse. The placement is ord. (if not otherwise specified). The x symbol on the stem of the right hand strum indicates to specifically damp this string. Pluck or strum as desired.
 - *3. The marking indicates with nail.
 - *4. *after attack, lightly touch string to produce buzz* – self-explanatory.
- 2
- *5. Tap body, changing locations – either left or right (or both) hands may tap body.
 - *6. Strum/pluck with right hand while the left hand will tap the soprano voice and finger the alto ordinario.
 - *7. coulé – legato, in which the 2nd note is not reattacked with right hand, but only with left hand (but not a strong tap).
 - *8. When right hand placement note-head goes above staff, this indicates that the right hand pluck should be above (or to the left) of the left hand fingering.
 - *9. When right hand placement note-head goes above staff, this indicates that the right hand should go below bridge.
- 3
- *10. While plucking, the right hand should oscillate rapidly between two fairly well-defined locations.
 - *11. During the slight caesura, put thimbles on the four fingers (1-4) of the left-hand.
 - *12. Oscillation of the degree of depression / here specifying the relative height of the left-hand depression.
- 4
- *13. Tap strings as indicated (R=right-hand; L=left-hand).
 - *14. Grace notes are parenthetical as the pluck should occur to the left of the stop.
 - *15. *flautando sbarrato*, not very loud – good for quick figurations.
- 5
- *16. The gesture is an erratic movement from high to low with the left hand, which features also an erratic change of depression height; while the right hand features very fast plucking gestures, though NOT in a steady rhythm or rhythmic gesture, more to the right than the left of the stop, but always with the impression of a dual tone on both sides of the stopped note.
- 6
- *17. Thimbles on left-hand – the effect should be one of timbral diversity, even within slurred passages.
 - *18. Pluck both above and below (to the left and right of) the stopped note.
- 7
- *19. Slightly muted pizzicato.
- Variation 2, page 1 (8)
- *20. The strums in the second movement refer, in part, to strumming styles found in central Asian music.
 - *21. Extremely rapid oscillation of left-hand depression between a fully depressed string and a fully raised string with the fingers no longer touching the string.
 - *22. Articulations 3 and 4 of the quintuplet are plucked, not strummed.
 - *23. During the right-hand strum, the right-hand will oscillate between normal and *ponticello* 2.
- Variation 3, page 1 (12)
- **general note*: Variation 3 features a progressive scordatura, in which the initial tuning is retuned through a series of five steps. The final tuning that occurs in Variation 3 (11) is designed to assist a psychoacoustic experiment, in which by its absence from a predominantly inharmonic sonority, a pitch-band will be heard. Three statements are heard: the first leaves out scale degree 2 of a five-note chord; the second leaves out scale degree 3, and; the third leaves out scale degree 5 of a six –note sonority. Each statement uses a plectrum made of different material - wood, plastic, metal. The strums should be as fast as possible to attempt to set up a consistently inharmonic sonority. Try to hear for the absent tone.
 - *24. Tap with left-hand; pluck and/or strum with right-hand.
 - *25. Lower staff indicates left-hand articulation
 - *26. Strong offset of right-hand articulation that strikes strings 2 and 1 at fret XIV.
 - *27. A sharp, quick snap on the palm, underneath the knuckles, centered on fret X – a pitched sonority should result.
 - *28. Vary pressure of palm on string during the rapid oscillation of place.
 - *29. Right-hand taps with finger -m- on string 1 as indicated; then one-sixteenth note later the right-hand plucks with -i- and -a- the pitches indicated on string 1, while continuing to sustain the note fingered by -m-. A similar action continues in the next left-hand gesture on string 6.
- 2 (13)
- *30. Detune string 3 as indicated with the left-hand, while tapping with the right-hand. Note that the indicated pitches on string 3 will become unstable, and this is desired.
- 3 (14)
- *31. Left-hand finger moves rapidly back and forth over strings 1 and 2.
 - *32. Left-hand trill while twisting in a tight radius – expect slippage around string 1.

- *33. Right-hand trill while moving rapidly back and forth over string 1. Note the overlap on string 1 in these gestures – expect irregular sonorities to result.
- *34. Tap guitar body with fingernail on right-hand as indicated.
- *35. Tap guitar neck with fingernail on left-hand as indicated.
- 4 (15) *36. On string 2 first tap as indicated and then follow with a snap pizzicato on string 2, while continuing to sustain the g#.
- *37. ‘Multiphonic’ harmonic produced by plucking exactly ½-way between 2 frets.
- 5 (16) *38. Tune string 5 up a minor 2nd to a# - the performer may choose to use either right or left, or both at alternate times.
- 6 (17) *39. Left-hand, stop string 2 at two locations at the ‘pitches’ specified.
- *40. Detune string 2 down a minor 3rd to g#, while improvising strums (strums need not be constant). Leave out notes as needed in order to retune string.
- 7 (18) *41. “All thimbles off!” Do not theatrically exaggerate this gesture.
- 9 (20) *42. Rapidly oscillate dynamic level between *p* and *ppp* – this should be faster than the articulated pitches. Tune pitches as possible.
- 10 (21) *43. Pull string 1 up.
- *44. Pull string 1 three times and let snap.
- 11 (22) *45. First absent tone statement – try to hear scale-degree 2.
- *46. Second absent tone statement – try to hear scale-degree 3.
- 13 (24) *47. Third absent tone statement – try to hear scale-degree 5. Use right hand to stop the uppermost tone of the five-note sonority.
- Variation 4, page 1 (25) **general note*: Variation 4 should be played at a more or less constant tempo, not too fast. Savour the silences.
- Variation 5, page 1 (31) **general note*: Variation 5 is a departure from the other variations, as it primarily focuses upon sustained sounds driven by slightly dampened household cleaning pads. In 2004-05, these particular pads are common in Berlin, but not in the U.S. The manufacturer description is as follows: “*flink & sauber Schwamm-tuch; enorm saugfähig; reinigungsstark; 20X19cm; kochfest*” note that the thickness and type of material are important. Four equal-sized pads will be needed, each approximately 8x5.5 cm. The pads should have the ability to produce a wide variety of sounds that are produced through gripping the string and/or slipping over the string at various velocities. The pitches range from very low to very high. The timbres range from nearly pure, sine-like tones to extra-complex sonorities, featuring more than one perceptible pitch.
- 4 (34) *48. The rhythmic values of the left and right hands are not intended to be together. The right-hand should be more-or-less strict, while the left-hand should feature more flux – in general, the rhythmic placement should follow the visual layout on the page.
- 6 (36) *49. Left-hand tap at the specified frets on string 3, while the right-hand features back and forth motion along string 3 whose width is constantly varying.
- Variation 6, page 1 (38) **general note*: Variation 6 has to do with relative amounts of complexity. Often the hands interchange position (crossing each other) and function by serving to finger pitches or drive the string oscillation. In some ways this variation is a dedicated to the issues surrounding multi-task capabilities of the biological human creature.
- 10 (47) *50. A bit hard to read, the indication for string 6 refers to the g, f, g of the 64th note grouping. The fingering on string 1 occurs on the high B-flat.

** **Albinus, Bernhard Siegfried. *Tabulae sceleti et musculorum corporis humani*. (Londini : Typis H. Woodfall, impensis Johannis et Pauli Knapton, 1749).**

Bernhard Siegfried Albinus (i.e. Weiss) was born in Frankfurt an der Oder on February 24, 1697, the son of the physician Bernhard Albinus (1653-1721). He studied in Leyden with such notable medical men as Herman Boerhaave, Johann Jacob Rau, and Govard Bidloo and received further training in Paris. He returned to Leyden in 1721 to teach surgery and anatomy and soon became one of the most well-known anatomists of the eighteenth century. He was especially famous for his studies of bones and muscles and his attempts at improving the accuracy of anatomical illustration. Among his publications were *Historia muscolorum hominis* (Leyden, 1734), *Icones ossium foetus humani* (Leyden, 1737), and new editions of the works of Bartholomeo Eustachio and Andreas Vesalius. Bernhard Siegfried Albinus died in Leyden on September 9, 1770.

Bernhard Siegfried Albinus is perhaps best known for his monumental *Tabulae sceleti et musculorum corporis humani*, which was published in Leyden in 1747, largely at his own expense. The artist and engraver with whom Albinus did nearly all of his work was Jan Wandelaar (1690-1759). In an attempt to increase the scientific accuracy of anatomical illustration, Albinus and Wandelaar devised a new technique of placing nets with square webbing at specified intervals between the artist and the anatomical specimen and copying the images using the grid patterns. *Tabulae* was highly criticized by such engravers as Petrus Camper, especially for the whimsical backgrounds added to many of the pieces by Wandelaar, but Albinus staunchly defended Wandelaar and his work. Several important plates are missing from NLM's copy of the first Leyden edition of 1747, so scans were performed from the London 1749 edition instead. The plates were newly engraved for this edition by Charles Grignion (1717-1810), Jean-Baptiste Scotin (b. 1678), Ludovico-Antonio Ravenet (fl. 1751), and Louis-Pierre Boitard (fl. 1750). An English translation of the text of *Tabulae* was published in London in 1749 under the title, *Tables of the skeleton and muscles of the human body*.