

BOSANQUET - A BRIDGE -
A DOORWAY TO DIALOG.

by Erv Wilson, Sept. 1974.

((Note: This is the slightly edited text of the letter accompanying the six pages of diagrams which follow. I have taken the liberty of adding two pages of a 1965 article on classification and notation. ---J. Chalmers))

The Bosanquet does imply linear temperaments, and especially over equal, since the top of the keyboard cannot be reached, usually, by the fingers from the bottom--and the great number of digitals are provided primarily for the modulation of a smaller fingerable module. The justification for equalizing, then, would be: 1. It simplifies acoustical tables; 2. It saves on tone generators (but shared generators invalidate that); 3. In some cases it is so near to the temperament the theorist has judged to be "best" that it might as well be used instead. "Best" depends on our weighting system, of course, which can only be called arbitrary.

On my page 6--the 1 3 5 7 9 11 Diamondic Cross-Set with its shown fingering calls-out for linear temperament, especially as the members 5/9 and 11/5 fall on the same digital (for homogeneous fingering), D-, as do their reciprocals 9/5 and 5/11 at B+. Also the 1·3·5·7·9·11 "Combination Sets" suggest the linear temperament eventhough they are 100% articulate (surprisingly) on the keyboard. May I point out, however, that members 3·9, 9, and 3* are within 2 skhismas of members 5·7·9·11, 3·5·7·11, and 5·7·11* respectively (* and their intersects, of course). This strongly, even overwhelmingly, indicates a closing of the series at the cycle 41. This is not too surprising, considering that I based the fingering on modulus 41 to begin with, but in a sense, I'm delighted with this neat bit of acoustical confirmation of the cycle coming in from the other end of things.

Aside from acknowledging Meantone, my diagrams do not stress the corresponding mappings of harmonic modules. A keyboard diagram illustrating these can/should be set up to go with your linear temperaments. I can prepare these in collaboration with you, or you may feel free to trace or revise any of my diagrams. ((This would be a good project for a future issue of XENHARMONIKON. --J. Chalmers))

I am emphatically biased toward the positive systems, as I feel this is where my ("Our" is presumptuous.) great new adventure lies. We've always had the Fifth or the Third on some kind of borrowing system that takes from Peter to pay Paul. In the positive systems--and FOR THE FIRST TIME IN WESTERN HISTORY we have both the Fifth and the Third, both Pythagorean and Just. But instead of borrowing from 3 to pay 5, in linear temperaments (especially 41 approximations) we now borrow from 5 to pay 7 and 11, far lesser apostles.

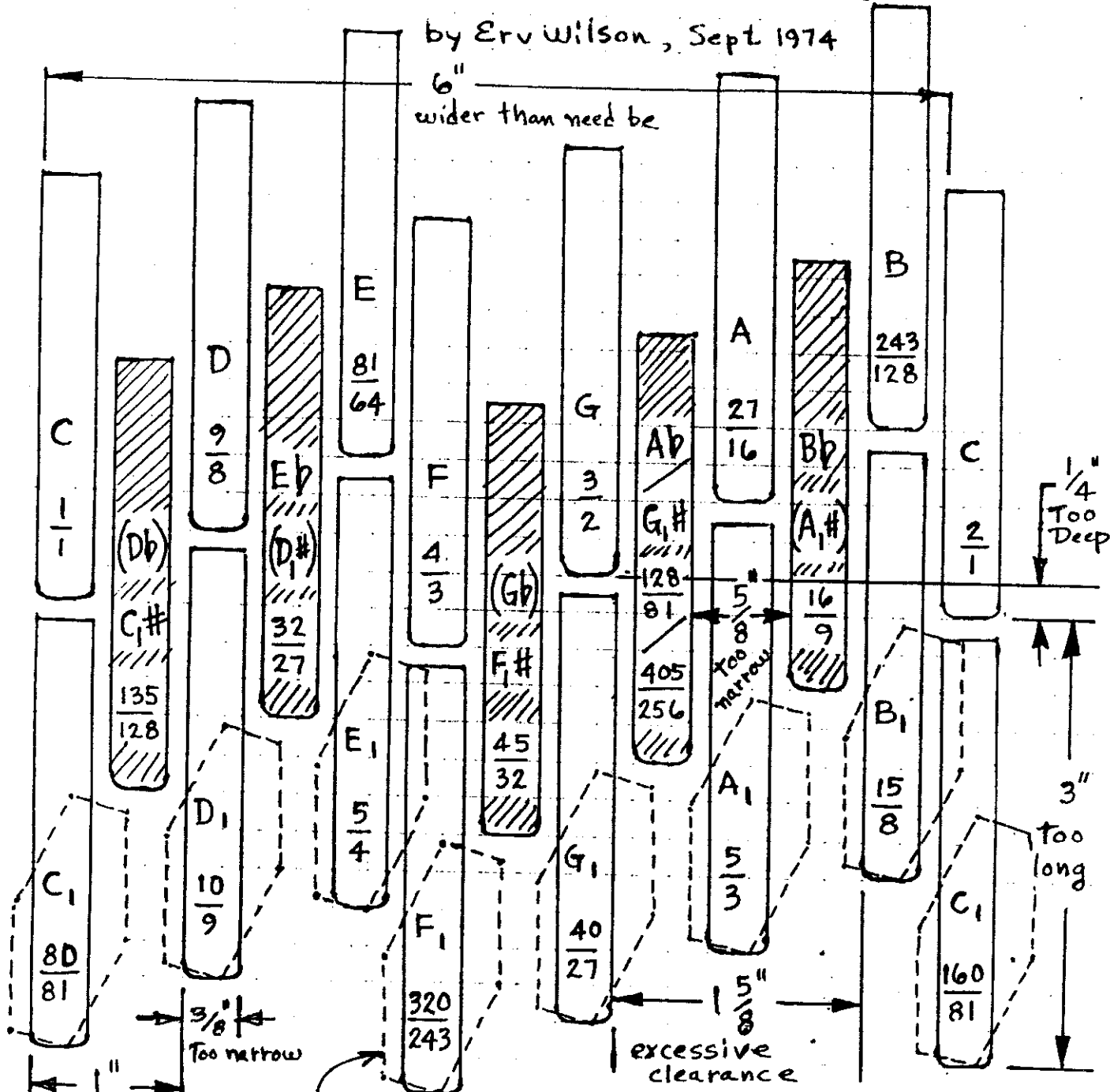
And the positive (Fb = 5/4 of C) systems do open the door of Dialog with India. And that's a mind-blower. It is difficult to gaze, without flinching, upon the implications of this anticipated encounter. All the Ragas of India! If changing the derivation of the 5/4 is like a high tide to our comfortable habits, then un-fixing our pitches must be like the undertow.

I see the eloquence I've struggled for all week is surfacing this morning!

Colonia Pacheco
Chihuahua, Mexico
Sept. 13, 1974.

Bosanquet - A Bridge - A Doorway to Dialog

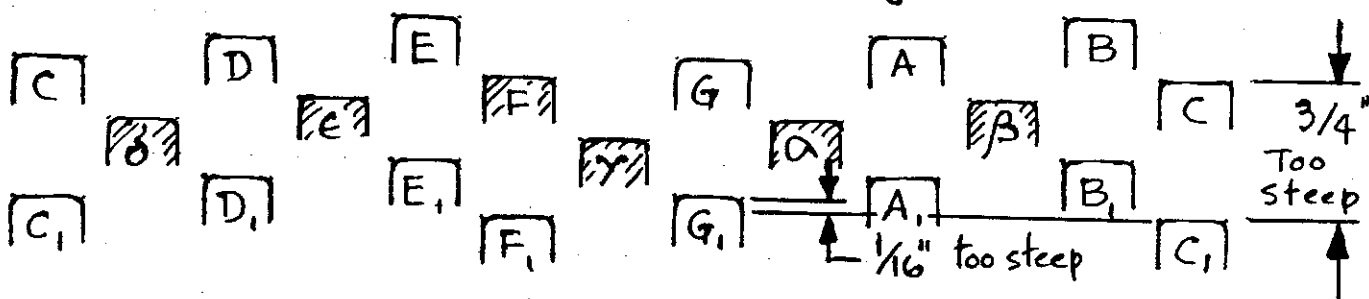
by Erv Wilson, Sept 1974



exceeds best knuckle leverage for average hand

this shape is better suited to the geometric schema. Spatially efficient, visually pleasing, & sensually tactile

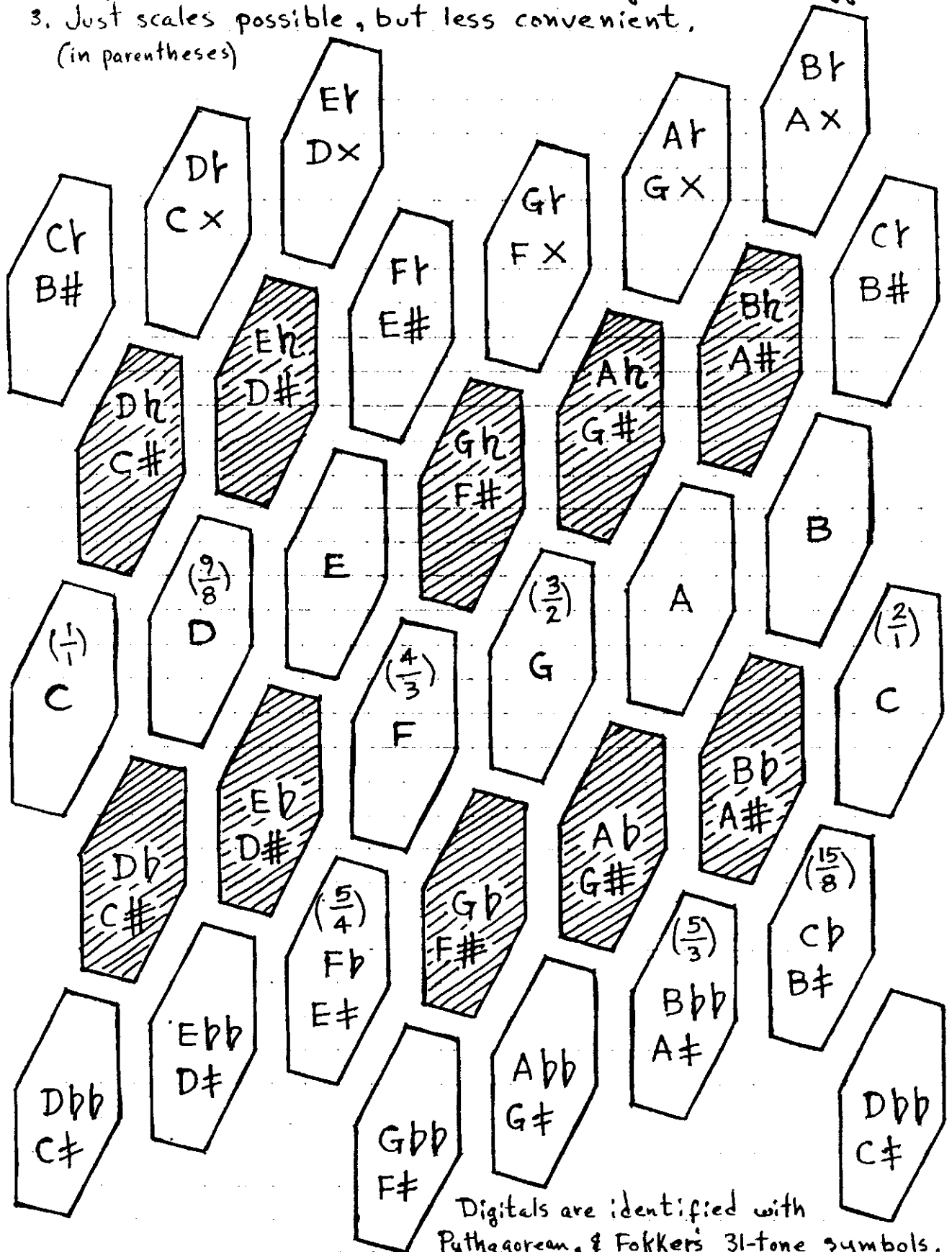
R.H.M. Bosanquet's Keyboard



A. Changing the Shape

2.

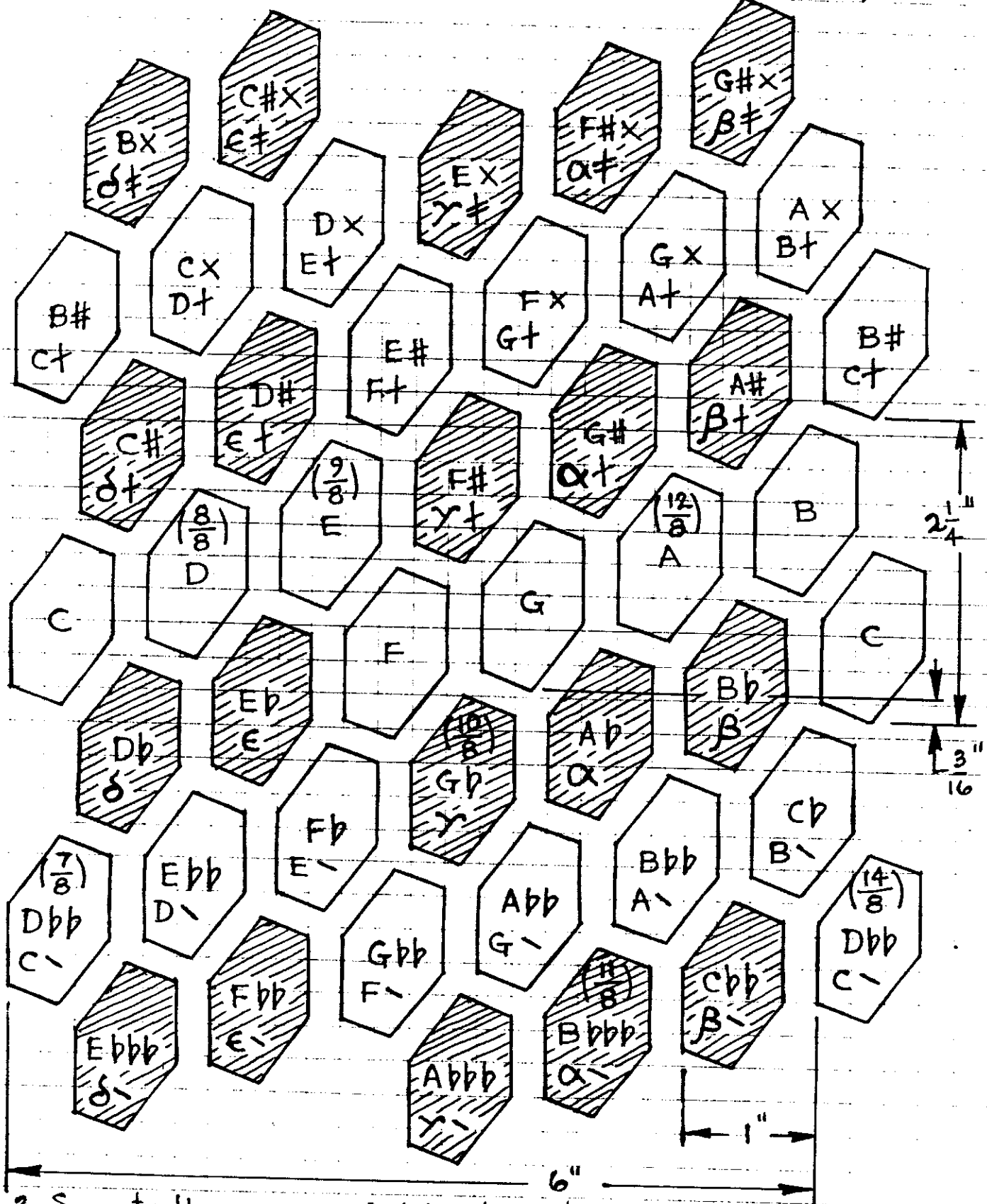
1. Eliminates dead-space, & increases tactile ratio.
2. Major/Minor scales convenient in all keys. Meantone suggested.
3. Just scales possible, but less convenient,
(in parentheses)



Digitals are identified with Pythagorean, & Folkers 31-tone symbols.

B. Foreshortening the Vertical Axis

3.

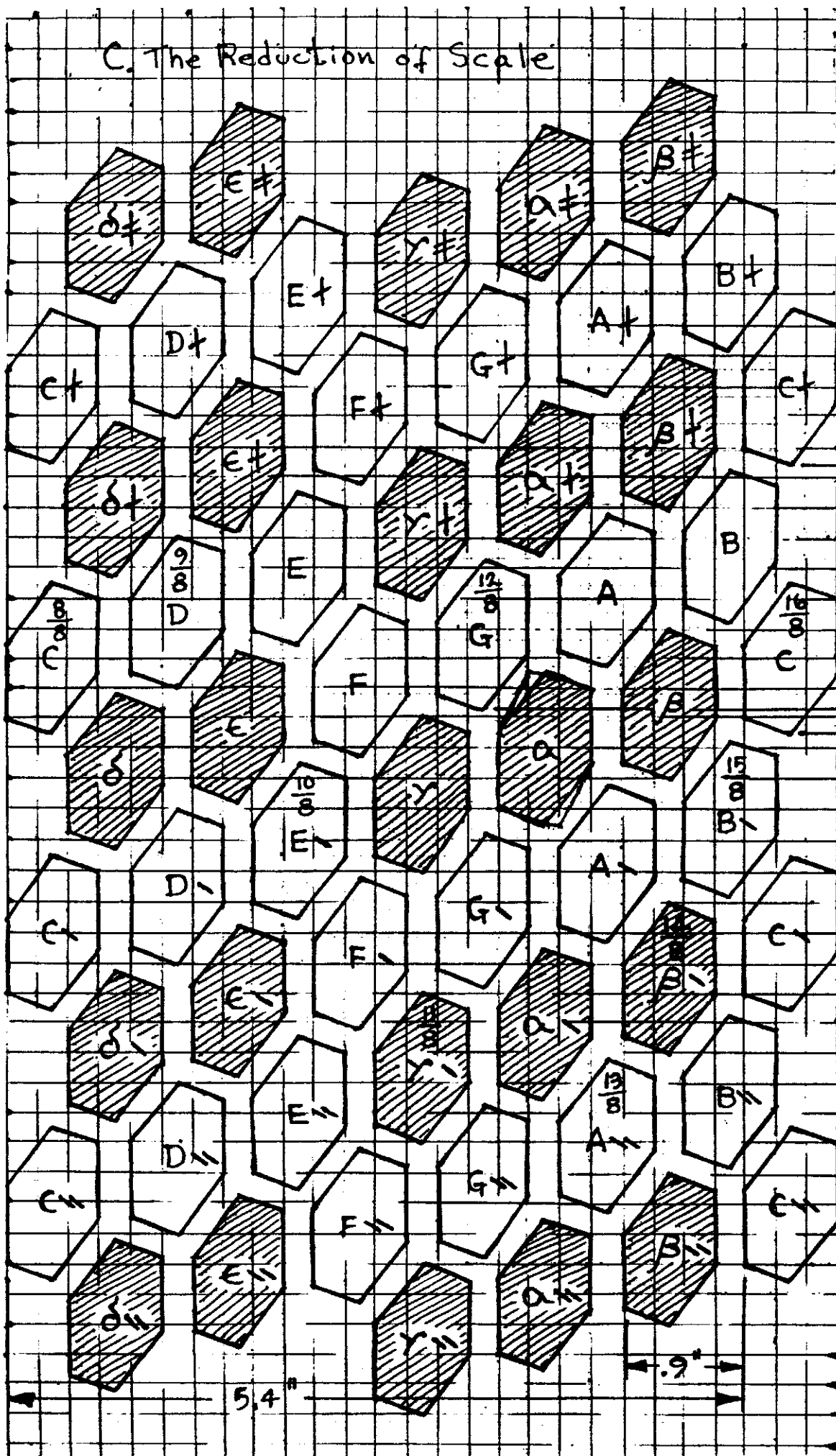


2. Suggests the mapping of 11-limit Just-Constructs & Tonelattices.

(All innovation over Bosanquet is by Erv Wilson. All rights reserved.)

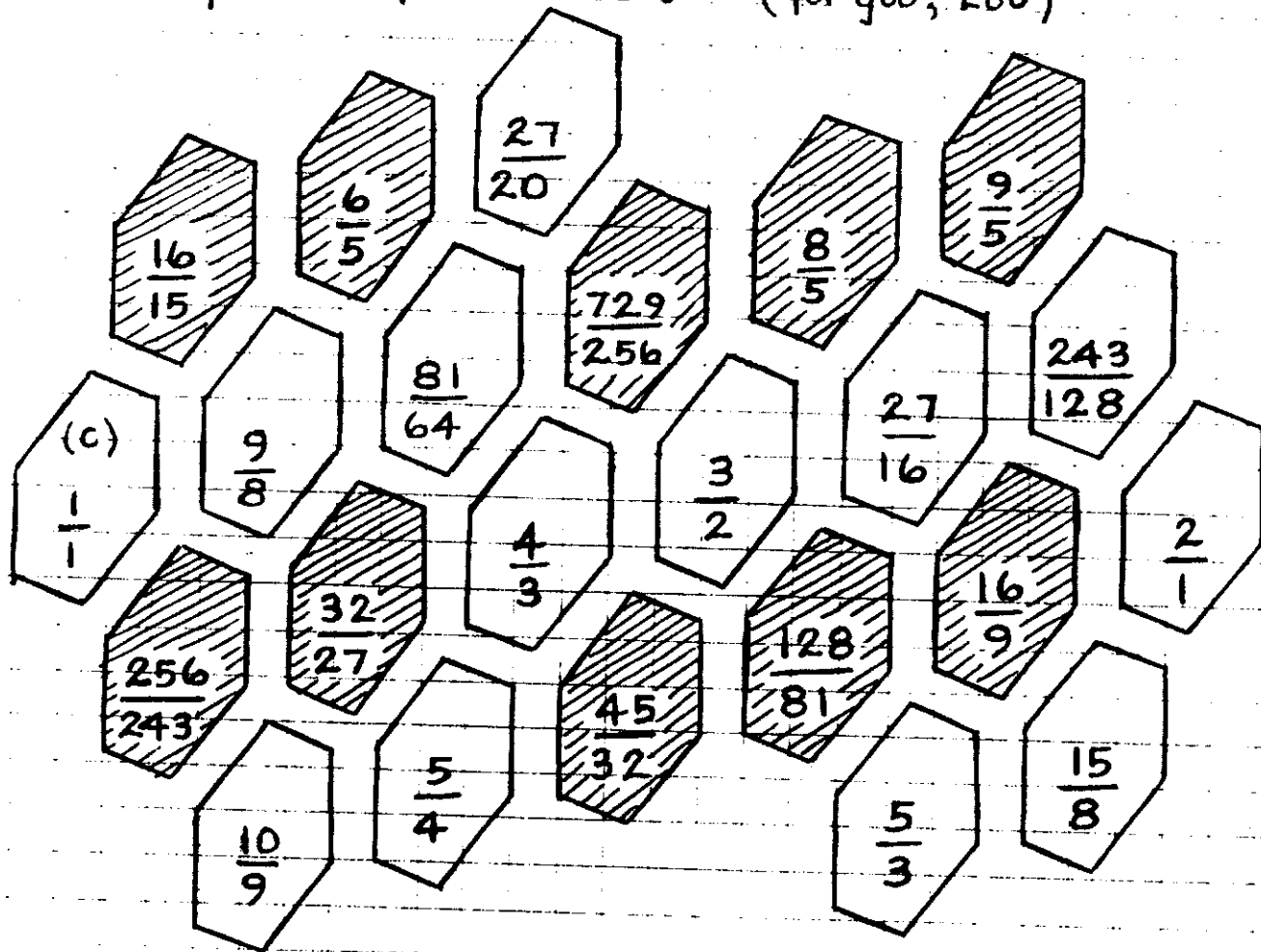
C. The Reduction of Scale

4.



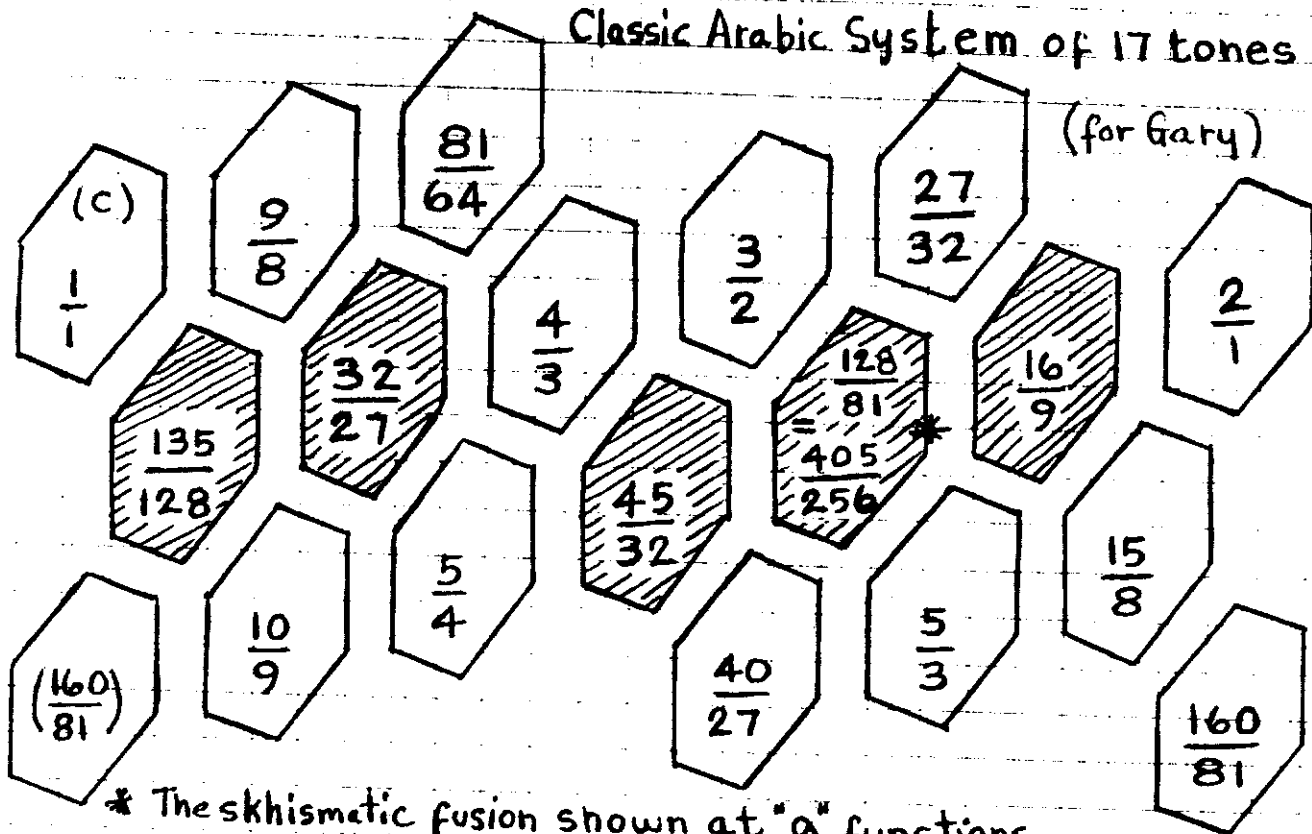
Indic system of 22 s'ruti: (for you, Lou)

5.



Classic Arabic System of 17 tones

(for Gary)



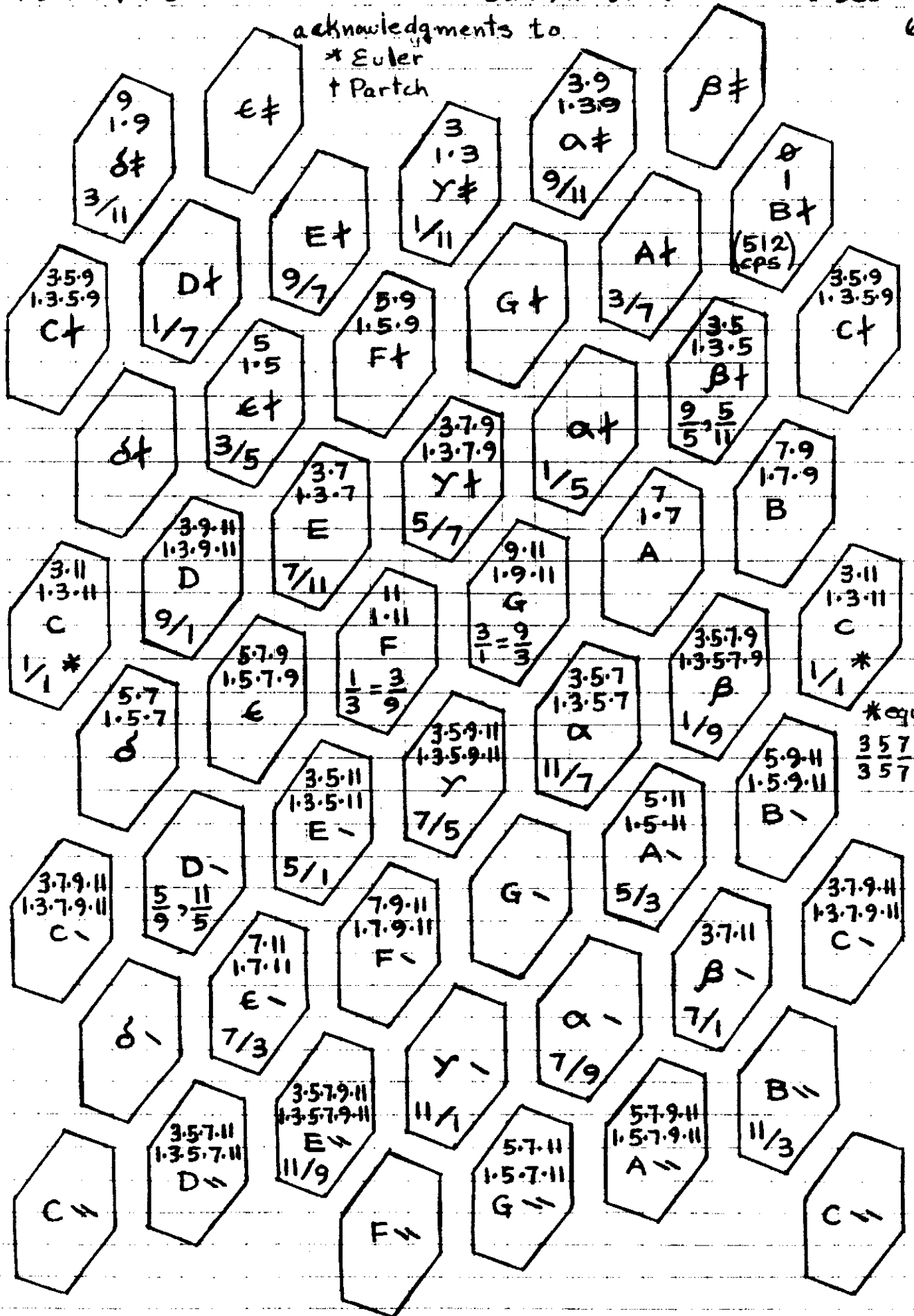
* The skhismatic fusion shown at "a" functions thru-out the system.

1-3-5-7-9-11 Combination Sets * - 1357911 Diamondic Cross-Set †

acknowledgments to

* Euler
† Partch

6.



**A CLASSIFICATION OF TONAL SYSTEMS,
AND A PROPOSED STANDARDIZATION OF SIGNATURES**

Issued by Erv Wilson March 1, 1965

3bly positive	2bly positive	Positive	Neutral	Negative	
		5	12	19	Singular systems
	10	17	24	31	Binary systems
15	22	29	36	43	Ternary systems
27	34	41	48	(55)	Quarternary systems
39	46	53	(60)	(67)	Quinary systems

Illustrative definition:

Singular system: One unit interval separates C from C#
 Binary systems: Two unit intervals separate C from C#
 Ternary systems: Three unit intervals separate C from C#
 Quarternary systems: Four unit intervals separate C from C#
 Quinary systems: Five unit intervals separate C from C#

Negative systems: B# is one unit interval below C
 Neutral systems: B# is equivalent to C
 Positive systems: B# is one unit interval above C
 2bly positive systems: B# is two unit intervals above C
 3bly positive systems: B# is three unit intervals above C

Note: The signs bb, b, ♯, ♯, * are, without exception, as derived by Fourths.

Fractional Signature:

Applicable Systems:

Whole	bb	b	♯	♯	*	5	12	19	Singular
1/2	bb	h	b	♯	♯	♯	♯	*	10 17 24 31 Binary
1/3	bb	h	h	b	♯	♯	♯	♯	15 22 29 36 43 Ternary
1/4	bb	h	h	h	b	♯	♯	♯	27 34 41 48 55 Quarternary
1/5	(Not designed.)					39	46	53	60 67 Quinary

12 is the Neutral, Singular system and requires the Whole signature.
 22 is the 2bly Positive, Ternary system and requires the 1/3 signature.
 31 is the Negative, Binary system and requires the 1/2 signature.
 41 is the Positive, Quarternary system and requires the 1/4 signature.
 53 is the Positive, Quinary system and requires the 1/5 signature.

